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May 30, 1906

# MUNICIPAL JOURNAL AND ENGINEER



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#### SPECIAL NOTICE

In the respective following issues of the Municipal Journal  
and Engineer considerable space will be devoted specially to  
the subjects as indicated:—

—1906—

- |               |       |   |
|---------------|-------|---|
| June 6th      | - - - | PAVING  |
| July 4th      | - - - | WATER   |
| August 1st    | - - - | SANITATION                                    |
| September 5th | - - - | THE CITY BEAUTIFUL<br>—Parks, Monuments, Etc. |
| October 3d    | - - - | FIRE AND POLICE                               |
| November 7th  | - - - | LIGHTING<br>—Gas, Electricity, Etc.           |
| December 5th  | - - - | BRIDGES                                       |



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discussing matters of current interest.

It is also desired that the facilities furnished by the reference  
library in this office should be widely known and freely used by  
those interested in municipal affairs. Visitors will be welcomed  
and provided with conveniences for search, and inquiries by mail  
will be promptly dealt with.

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and John La Farge, and apparently there is no reason why Congress should not give it early approval. This movement furnishes thought for city officials; at least, it should. Already it has been shown that elements in Cleveland, Ohio, and Columbus, Richmond, Va., and Charleston, S. C., Boston, Mass., and Seattle, Wash., are abreast of the times. They have their civic leagues at work, as have other municipalities, smaller and larger in size. Why do other municipalities delay in this work? This is the day of civic betterment and procrastination to-day means a needless expenditure of money in the days and years to come. It is not difficult to understand that the costliness of such improvement is due to the lack of artistic taste when the cities began their growth. Washington, D. C., is an exception, for it was planned correctly. Let municipalities act promptly in the matter.

## Continuous Transportation

It now appears that the defects hitherto existing in urban transportation systems are that human beings have not been handled in a way sufficiently analogous to the best methods of conveying material objects. Notwithstanding the protestations against this statement that may be made by those suffering members of the common people who have been battered about at the approach to the Brooklyn Bridge and the New Jersey ferries, the statement is literally true. The greatest capacity for carrying inanimate objects may be attained by the use of a continuous belt or buckets so close together that they are in effect continuous. The use of moving platforms for city transportation was urged by a speaker at a recent meeting of the electric club. The proposed platforms propelled by electricity may have seats, passenger stations, ticket booths, guards, lights, in fact, everything that goes to make up a first-class railway. They will differ from the ordinary railroad in that there will be no unoccupied intervals and waste spaces, but a continuous seating capacity throughout the length and breadth of the railway. In order that passengers may get on and off the train easily there will be, at each station, secondary platforms, moving at reduced speeds. As the passengers are traveling continuously in one direction, there can be no congestion, a condition of affairs ordinarily brought about by the sudden stopping of masses while waiting for another car. The capacity of these new conveyances is limited only by width and speed; a platform holding four passengers in one seat will carry 70,000 an hour at a ten-mile speed, which is a moderate rate. No doubt suburbanites will watch the development of this plan with pleasant anticipations.

## Civic Art to the Front

THERE is a bill pending in Congress which provides for a National Advisory Board on Civic Art, whose object shall be to give advice on all questions relating to fine arts under the control of the Federal government. In various cities throughout the country, public-spirited citizens are giving the subject their consideration, and in a score or more municipalities action has already been taken by the City Councils for civic improvement. The plan adopted for the upbuilding of Washington has led to the movement for the national advisory board, which, it is provided, shall treat with matters not only regarding the beautification of the National capital, but shall consider plans for the construction of Federal buildings in all parts of the country, in order that they may not be in conflict with the architectural design of localities of cities in which they may be constructed. That the bill is a worthy one is evidenced by the fact that it is indorsed by such men as Richard Watson Gilder, Augustus St. Gaudens,

**Brevities.**—ATLANTA, GA., Council is considering a resolution of Councilman W. W. Draper for issuing \$1,000,000, 4 per cent. bonds, of which \$250,000 are to be for streets, \$300,000 for schools, and \$450,000 for a City Hall and public auditorium.

BATON ROUGE, LA., Council is unanimously in favor of a municipal water plant and may purchase the property of a private company. City Engineer Griffin O'Neil and Mr. Hirman Phillip, a hydraulic engineer, of St. Louis, Mo., former President of the Board of Water Works of that city, will appraise the value of the property.

BERKELEY, CAL., Board of Trustees have instructed City Attorney Johnson to draw up a call for a bond election, covering improvements amounting to \$555,000. Storm sewers will cost \$250,000; Fire Department improvements, \$55,000; installing a police-alarm system, \$10,000; new city wharf in West Berkeley, \$100,000, and a new Polytechnic high school, \$140,000.

BRIDGEPORT, CONN., through Mayor Reynolds and a special Council Committee on Water Supply, has secured concessions from the Bridgeport Hydraulic Company, including a material reduction in rates, providing a long-term contract is made, and the right of consumers to use meters. The company, however, flatly refuses to sell its plant, or to provide free water to the city.

BUFFALO, N. Y., Aldermen voted to pay gas bills, amounting to over \$62,000, which have been held up since last October, and in the event these are paid, the company will extend mains in sections which the city authorities have been long anxious to supply.

CLEVELAND, OHIO, will install a complete high-pressure water system in the down-town district, providing the recommendation of President Excell of the Board of Public Safety for the disposal of the sinking fund of 1862, is adopted.

COLUMBUS, OHIO, Council is considering issuing \$5,000 bonds to pay the expenses of a landscape gardener; also an ordinance for increasing the salaries of members of the police force.

GLOUCESTER, N. J., is having a house-to-house inspection, in order to secure a detailed report on the consumption of water.

HADDONFIELD, N. J., Council is enforcing the ordinance prohibiting the use of wooden curbs in the streets.

LAWRENCE, MASS., has a committee, consisting of Aldermen James, Weeks, and Ahearn, investigating the operations of the dual telephone systems in other cities, with a view to granting another franchise.

LOS ANGELES, CAL., will construct twenty-two new school buildings, to be ready before the opening of school the latter part of September.

MINNEAPOLIS, MINN., by a resolution approved by Mayor Jones, submits to a vote of the people the question of issuing bonds for a filtration plant. A resolution, setting apart \$50,000 from the surplus in the waterworks fund for aiding in the construction of the plant, is also effective.

NIAGARA FALLS, N. Y., wants the water company to use meters, but the company declines on the ground that

such action would cut its revenue in half. Mayor Cutler threatens to take the matter to the courts, in which event the company replies that it would cancel its contract. Final answer will be given the Board of Public Works June 1, and may result in the city paralleling the lines of the company.

PUEBLO, COL., citizens voted almost unanimously to create Public Water Works District No. 2; to purchase the waterworks plant and property of the Pueblo Water Company, and to bond the district for the purpose.

SEATTLE, WASH., is considering an ordinance drafted by Superintendent Walters of the Street Department, regulating the hanging of electric and other signs.

SHREVEPORT, LA., secured natural gas last week, and citizens can now burn 1,000 cubic feet of the genuine product for 31½ cents, instead of paying \$1.60, the existing rate for the artificial fluid.

ST. LOUIS, MO., citizens are agitating the matter of free bridges, the city being, in this respect, far behind other cities, towns, and villages in the world.

THOMASVILLE, GA., will adopt a new system of book-keeping in the city departments, the Council having engaged John F. Parker, Treasurer of Thomas County, to open the new set of books.

UNIONTOWN AND DONORA are among the Pennsylvania towns which demand furnaces to cremate garbage in order to suppress the unsightly and insanitary dumping grounds.

WILMINGTON, DEL., Street and Sewer Directors will supervise the lighting of the city's streets at the expiration of the existing contract, on June 1.

WOODYLYNNE, N. J., citizens have voted against annexation to Camden. Mayor E. J. Painter, who is opposed to the incorporation of the town into a ward of Camden, says the people realize the fact that the borough will ultimately become a part of Camden, but the town is able to take care of itself for the present.

**Some Unusual Fires.**—CHRISFIELD, MD.—Twenty-three houses were burned up. Cause unknown. Amount of damage, \$50,000.

DETROIT, MICH.—Barn and automobile burned up. Cause, gasoline explosion. Amount of damage, \$3,500.

DORCHESTER, VA.—Entire business section of town. Cause unknown. Amount of damage, \$25,000.

LIMA, OHIO.—Four residences burned up from fire originating in a barn. Cause unknown. Amount of damage, \$30,000.

MARQUETTE, MICH.—Forest fires covering area of two hundred square miles burned up a number of small towns.

MILWAUKEE, WIS.—Product plant of Milwaukee Coke and Gas Company. Cause unknown. Amount of damage, \$90,000.

NASHUA, N. H.—Residence of ex-Alderman McQuesten burned up. Cause, sparks. Amount of damage, \$35,000.

NEW YORK CITY.—New York Sanitary Reduction Company's plant, Barren Island. Cause, spontaneous combustion. Amount of damage, \$1,000,000.



REINFORCED CONCRETE BUILDINGS are to be put under the ban at Cleveland, Ohio, by an ordinance prepared by Building Inspector Vorce. By amending the building code, it is provided that an inspector shall be on hand when the concrete is mixed or placed, and that the owners of the building shall pay \$5 per day for such inspection.

WATER RATES OF TRENTON, N. J., which are said to be lower than those of any city in the country, are insufficient to provide funds for needed extensions of pipes, to increase pumping facilities, and to lay larger mains in the center of the city. The present consumption of water is nearly equal to the capacity—17,000,000 gallons per day.

THE BILLBOARD NUISANCE will probably be abated at Buffalo, N. Y., on the recommendation of Mayor J. N. Adam. Alderman Fuhrman has drafted an ordinance fixing an annual tax of \$25 for every fifteen feet of horizontal frontage of billboards not over seven feet high, and \$75 for every fifteen feet of horizontal frontage of billboards above that height.

THE LARGEST CONCRETE SPANS IN THE WORLD are to be used in a new bridge over the Monongahela river, specifications for which have been drawn by the Union Railroad. The bridge, which is to cost \$500,000, will start from the center of the old bridge at Bessemer and run to the west side of the river. The cut-off is designed to effect a better entrance into Homestead. President J. H. Reed, Pittsburg, Pa., has the matter in charge.

THE BUILDING LAWS OF THE DISTRICT OF COLUMBIA will be revised by a committee appointed by the Commissioner, on recommendation of Engineer Commissioner John W. Biddle. It consists of F. L. Averill, Appleton P. Clark, Jr., Leon E. Dessez, Dr. George M. Kober, James L. Parsons, Thomas W. Power, Joseph Richardson, William B. Upton, Nathaniel Wilson and S. W. Woodward, who will serve without compensation.

ENGINEERS AND ARCHITECTS OF WATERTOWN, N. Y., recently formed a society for the advancement of all lines of engineering, being brought together largely through the efforts of Mr. Henry E. Baker, City Engineer, and Engineer of the Water Board. At the first meeting, Mr. Frank A. Hinds, M.Am.S., C.E., who was elected President, read a paper on the water power of the Black river. Other subjects relating to the profession will be treated by speakers and discussed by members at future meetings.

ALL LIGHT, POWER AND TRACTION COMPANIES in the lower Willamette valley, including Portland, Oregon, have been consolidated by a deal involving \$30,000,000. The purchasers are E. W. Clark & Co., Philadelphia; J. & W. Seligman and Charles Pratt & Co., New York. The companies absorbed are: Portland General Electric Company, estimated value, \$10,000,000; Portland Railway Company, \$12,000,000; Oregon Water Power and Railway Company, \$5,000,000; Citizens' Light and Traction Company, Salem, Ore., \$500,000; Vancouver Light and Power Company, Vancouver, Wash., \$200,000; and the Union Light and Power Company, Silverton, Woodburn and Mount Angel, Ore., \$100,000. The headquarters will be at Portland.

MR. WILLIAM HAMILTON has been made Water Commissioner of Erie, Pa., *vice* G. F. Brevillier, and the Board recently organized with Clark Olds as President.

DR. JOHN F. MCCARTHY, a dog fancier, has been named by Mayor John F. Fitzgerald, of Boston, Mass., as official dog-catcher of the city, a position worth \$2,500 a year.

MAYOR WILLIAM HICKMAN MOORE, of Seattle, Wash., is urging the appointment of an additional City Engineer to take over the control of regrade problems, in order that City Engineer R. H. Thomson may devote his entire time to the construction of a new pipe line from Cedar Creek to the city.

MISS NORA STANTON BLATCH has been elected to membership in the American Society of Civil Engineers. She is the first woman so honored, and was also the first woman accorded the degree of Civil Engineer by Cornell University.

MR. ELLIS B. NOYES, of Portsmouth, Va., presided at a preliminary meeting of a large number of Civil Engineers of Tidewater, Va., at Norfolk, recently, and appointed the following committee to formulate a plan for a Technical Society:—Messrs. Lee Shaffer, Suffolk; N. A. Melick, Norfolk, and Adolph Wagner, Newport News.

MAYOR JAMES M. TODD, of Springfield, Ohio, believes property owners should not object to paying more taxes for better fire and police protection, and has held frequent conferences with Fire Chief Samuel Hunter relative to improved waterworks system and additional apparatus.

MAYOR BEHRMAN, of New Orleans, La., and the Councils' Bitulithic Committee, consisting of Messrs. Barret, Bisso, Brandas, Goebel, Cahill, Seymour, Junker, and Kelly, and Chief O'Connor of the Fire Department, recently paid a visit to Birmingham, Ala., and other cities to inspect paving.

CHIEF OF POLICE JACOB DUNN, of Hackensack, N. J., who has been in command only a few months, has secured an increase in salary for his men and has adopted a new system for the force.

CITY ENGINEER R. B. MCKINNON, of York, Pa., has prepared an artistic plan of the Kurtz tract, which lies south and southwest of Penn Park. Contractor John H. Dobbling will grade the land.

CITY ENGINEER W. H. SIEVERLING and City Solicitor Stewart L. Tatum, of Springfield, Ohio, made a personal investigation of the plan in use in Toledo of assessing for sewers, whereby the property owners pay according to the benefits derived, and will make report to the Council.

JOHN JAMES ROBERTSON CROES, who died recently, had been a member of the American Society of Civil Engineers since 1867 and was President of that body in 1901-1902. He was prominently identified with the Croton Aqueduct undertaking, and the works with which he had been connected in a constructive or consulting capacity include many of national reputation. He was one of three expert engineers, the others being Rudolph Hering, of New York, and William M. Brown, of Boston, who reported on the sewerage of the Passaic Valley, advocating a trunk-sewer scheme.

## PATENT CLAIMS

820,387.—BUILDING-BLOCK. Charles S. Burton, Oak Park, Ill., assignor to Miracle Pressed Stone Company, Minneapolis, Minn. Serial No. 250,499.

A concrete building-block having interposed between its inner and outer surfaces a system of air-spaces, all inclined to the inner and outer walls, the portions of such system proximate to the respective walls being oppositely inclined, each air-space being intruded into the angle between the next two oppositely-inclined portions of the system.

820,394.—MAIL-CHUTE. Joseph W. Cutler, Rochester, N. Y. Serial No. 273,348.

The combination with a mail-receptacle forming a passage for postal matter, and provided with an aperture therein, of a panel fitted within said aperture having its upper edge inclined and its inner surface below said edge projecting inwardly beyond the inner wall of the receptacle.

820,428.—CONCRETE-MIXER. William B. Martin, Bloomington, Ill. Serial No. 282,172.

In a concrete-mixer, the combination with a spout, of guides disposed at the discharge end thereof, and provided with roller-bearings, a cut-off plate having its ends working between the bearings, a lip secured to the plate, and means for raising and lowering the plate.

820,461.—BUILDING CONSTRUCTION AND THE LIKE. William N. Wight, New York, N. Y. Serial No. 152,142.

A fireproof structure comprising in combination a concrete body and a wire fabric embedded therein, said fabric being composed of strands crossing each other and the set of strands in at least one direction being composed each of a plurality of wires which are comparatively close together and straight between the crossing-points, and the strands in at least one direction being separated by a comparatively great distance.

820,470.—ROOFING MATERIAL. Reginald W. Bird, Boston, Mass., assignor to Flintkote Manufacturing Company, Rutherford, N. J., a Corporation of New Jersey. Serial No. 267,701.

A roofing material comprising a body of suitable substance saturated with a waterproofing compound, an exposed layer of waterproofing compound of sticky consistency, and an outer coating of textile fabric united to the body by a layer of waterproofing compound.

820,563.—GAS-METER. James Geen, Brooklyn, N. Y. Serial No. 268,939.

In a gas-meter, a diaphragm including a stationary and a movable ring, a flexible connection of material impervious to gas, a pivotally-mounted flag-wire, the intermediate portion of said flag-wire being offset to form a crank, an end disk, and a connection between the crank portion of said flag-wire and said disk, said connection including a bridge composed of parallel members arranged horizontally on the back of said disk and a pivotal connection midway in said bridge for the flag connection.

820,607.—CAR-FENDER. Frank A. Seeley, New York, N. Y. Serial No. 290,863.

A fender for cars consisting of a swinging, horizontal platform suspended from the car, having a backward and downward movement, whereby the fender throughout its whole extent is brought down near the pavement in a plane parallel with the surface of the street by impact with the person struck, substantially as set forth.

820,672.—APPARATUS FOR CONSTRUCTING CONDUITS FOR WIRES, CABLES, ETC. Heinrich Rosner, Lemberg, Austria-Hungary. Serial No. 247,972.

A core of the class described comprising separate lateral core members provided with flanges extending beyond the body portions of said cores, and an interposed spacing member flush with said flanges, substantially as described.

820,700.—FIRE-ALARM BOX. Loudoun Campbell and Frank G. Campbell, Washington, D. C. Serial No. 253,795.

A fire-alarm box having a door, a lever located upon the exterior face of said door, a main-alarm mechanism, means for setting said main-alarm mechanism in motion when said lever is actuated and a frangible plate one edge of which engages said lever and the other edge of which engages a fixed member carried by the door.

820,702.—FIRE-ESCAPE. James C. Covert, Watervliet, N. Y. Serial No. 254,153.

In a fire-escape the combination of supporting-brackets, a hand or foot rail carried thereby, and means operatively associated with one of the brackets and the end of said rail for preventing turning or endwise movement of the rail relative to the bracket comprising a threaded portion of the rail and a pair of nuts engaging said threaded portion adapted to impinge upon the opposite sides of the bracket.

820,704.—REINFORCING-BAR FOR CEMENTITIOUS BODIES. Edward F. Crane, Newark, N. J. Serial No. 272,287.

A one-piece metallic reinforcing-bar for cementitious bodies having a plurality of substantially flat spirals of different depths as and for the purpose set forth.

820,733.—STREET-RAILWAY-CAR FENDER. John Post, Philadelphia, Pa. Serial No. 289,702.

A car-fender having its surface composed of inflatable cushions connected together for simultaneous inflation, substantially as described.

820,743.—BRIDGE CONSTRUCTION OF REINFORCED CEMENT. Olney A. Slater, Pontiac, Mich. Serial No. 262,127.

A reinforced concrete bridge structure, having in combination an arched floor structure, and concrete ribs having reinforcing-bars therein extending broadly from the floor structure at the ends and narrowing toward the middle, substantially as described.

820,747.—METHOD OF AND APPARATUS FOR LINING TUNNELS WITH

CONCRETE. Ross F. Tucker, New York, N. Y. Serial No. 215,731.

The method of lining the interior of a tunnel while the heading is being driven and without interfering therewith, consisting in applying the lining along a longitudinal section of the wall in one set of operations while maintaining a way for transporting material to and from the heading adjacent the opposite section, and then lining said opposite section and maintaining the way for transporting material to and from the heading adjacent the first section.

820,759.—SEWER AND CULVERT MOLD. Herman Besser, Alpena, Mich. Serial No. 286,929.

A mold comprising a base, side walls connected with the base, and having their upper edges in the same horizontal plane, guiding-plates adjustably mounted on the edges of the side walls at each end thereof, said plates being provided with notches, transverse core-blocks resting in the notches, and end walls connected to said plates and movable therewith.

820,790.—VOTING-MACHINE. Marquis H. Johnson, Buffalo, N. Y., assignor to Joseph F. Rosselli, Buffalo, N. Y. Serial No. 131,818.

In a voting-machine, the combination of a case, voting mechanism arranged in said case and including voting-keys and a key-restoring mechanism, a pair of doors applied to the front of the case, means for securing one of said doors substantially at right angles to the front of the case, and means for transmitting the movement of the other door to said key-restoring mechanism, substantially as set forth.

820,798.—BRIDGE. Charles Kutz, Louisville, Ohio. Serial No. 300,851.

A truss-bridge, the top chord and end posts of which are beams built up of flat plates and angle-beams secured to the sides thereof, the plate of the top chord projecting at its ends beyond the end of its angle-beams between the angle-beams of the end posts.

820,809.—STEAM-HEATING SYSTEM. Thomas S. Morgan, Chicago, Ill., assignor to Gwendolyn Cattell Morgan, Chicago, Ill. Serial No. 278,715.

In a steam-heating system, in combination, a vacuum-pump connected to the return-pipe of the system, and means to operate the pump controlled by the pressure, and also independently by the temperature, in the system.

820,823.—ELECTRICAL FIRE-ALARM APPARATUS. James P. Robertson, North Sydney, near Sydney, New South Wales, Australia. Serial No. 166,045.

In automatic alarm apparatus, the combination with alarm-signal-transmitting means for transmitting an alarm through a line-circuit, comprising automatic driving means, of a detent normally preventing operation of said transmitting means, an automatically-operated switch normally disconnecting said signal-transmitting means from the line, means for releasing said detent and operating said switch, ringing-circuit and signaling-circuit contact-pieces and a movable contact-piece coacting therewith and electrically connected to said switch, and means operated by said signal-transmitting means for moving said movable contact-piece alternately into contact with said ringing-circuit and signaling-circuit contact-pieces during the operation of the signal-transmitting mechanism.

820,839.—REINFORCEMENT FOR CONCRETE GIRDERS, &c. Sidney H. Woodruff, Buffalo, N. Y. Serial No. 299,008.

A reinforcement for concrete girders, beams, etc., comprising a lower horizontal tension-rod, and upper and lower shearing-rods each having a lower central horizontal part, inclined parts extending upwardly and outwardly from opposite ends of the central part and upper horizontal parts extending outwardly from the ends of said inclined parts, the lower horizontal part of the lower shearing-rod being longer than that of the upper shearing-rod and interposed between the same and the central part of the tension-rod and the horizontal ends of the upper shearing-rod being longer than those of the lower shearing-rod and arranged above the same, substantially as set forth.

820,876.—EXTENSION CAR-STEP. Gustaf G. Johnson, Wishaw, Pa., assignor to I. N. Rodkey, Spangler, Pa. Serial No. 277,493.

The combination with main steps of a supplemental step, guide-bars fixed to the main steps, bars attached to the supplemental step and having box-loops, a central bar, an operating-handle, means connecting the handle and bar, said handle having ratchet projections adjacent its upper end, a slotted plate through which the upper end of the handle works, a spring adapted to hold said ratchet projections in engagement with the slotted plate, a slotted guide-plate carried by the side of the steps and having a stop formed at its upper end, and guide-loops on the step side for said plates.

820,921.—CONCRETE-BRIDGE REINFORCEMENT. George M. Cheney, Indianapolis, Ind. Serial No. 302,895.

In a concrete bridge, an arch composed of a plurality of longitudinally-separable panels embedded therein.

820,940.—HYDRANT. Edgar R. Stoddard, Detroit, Mich., assignor to Eugene H. Sloman, Detroit, Mich. Renewed Sept. 23, 1905. Serial No. 279,852.

The combination of a valve-casing, a stand-pipe extending upward from said casing, a valve in said casing the stem of which extends upward adjacent to the stand-pipe, a hydrant attached to the upper end of said stand-pipe to turn thereon, and a ring sleeved on the hydrant and having an opening through which the valve-stem passes.

820,945.—VENTILATING SYSTEM FOR MINES, TUNNELS, OR SUBWAYS. Robert E. Booraem, New York, N. Y. Serial No. 265,769.

In ventilating systems of the class described, in combination, an underground passage or chamber, a hollow or open curb with flue or pipe connections connecting the outer air and underground passage or chamber, a gutter separated from the hollow or open curb by a longitudinal partition, whereby surface water is drained in proper channels and not allowed to flow into the subway or chamber.



## LEGAL DIGEST—

### A Summary and Notes of RECENT DECISIONS

#### City Loses Waterworks

HAROLD B. WELLS *vs.* BOARD OF WATER COMMISSIONERS, BORDENTOWN, N. J.—After hearing evidence and testimony, the Court directed a verdict for Wells, dispossessing the city from the old water company's pumping station. Wells has a separate suit to recover \$10,000 from the city, and this will be tried in September.—*District Court, Mount Holly, N. J.*

#### Don't Pay Demurrage

SOUTHERN CAR SERVICE CO. *vs.* JOHN B. PAYNE.—Suit alleged overtime on cars delivered to him filled with grain. Under the rules of the company cars not unloaded after forty-eight hours from time of delivery are charged at the rate of \$1 a day. Payne declined to pay for overtime and the company brought suit. Held that if due industry were exercised in unloading cars, and the receiver of them was prevented from unloading the cars, the consignee should not be held responsible.—*Decision by Justice Farmer, Lexington, Ky.*

#### Restricting Advertising

CHICAGO *vs.* GUNNING SYSTEM.—Forbidding the erection of billboards upon private property located on a boulevard or pleasure drive, or in any street where three-fourths of the buildings are devoted to residential purposes, without the consent in writing of at least three-fourths of the resident property owners on both sides of the street, is held to be unreasonable.—*District Court, Chicago, Ill.*

#### Minnesota vs. Railroad

STATE OF MINNESOTA, *ex rel* STATE RAILROAD AND WAREHOUSE COMMISSION *vs.* THE SOO LINE RAILROAD.—Under the Court's ruling the railroad must replace the switch at Otisville which it removed when a new town a mile away, at Copas, was provided with a new one.—*Decision by Judge Williston, of the District Court, Stillwater, Minn.*

#### No Fines for City

JAMES CURRAN *vs.* CITY OF PHILADELPHIA.—The plaintiff, who had charge of the street cleaning contract in 1903 for the district north of Poplar street and east of Broad, brought suit to recover moneys withheld from him by the city as fines and penalties, a verdict has been rendered in his favor for \$15,475.58. The city did not produce sufficient proof that the fines and penalties were properly imposed and that Curran had not done his work according to his contract.—*Court of Common Pleas, No. 5, before Judge Martin, Philadelphia, Pa.*

#### New York and Public Franchises

CLERMONT H. WILCOX, *appellant, vs.* GEORGE B. MCCLELLAN, MAYOR, *et al.*—The constitutionality of the law passed by the last Legislature taking from the Board of Aldermen in New York City the power to grant public franchises and conferring it upon the Board of Estimate and Apportionment, has been sustained. The appellants' first case was from a judgment of the Appellate Division, First Department, which unanimously affirmed a judgment entered upon a decision made by Justice James A. Blanchard, at Special Term, sustaining a demurrer to the complaint interposed by the defendants on the ground that the complaint did not state facts sufficient to constitute a cause of action. The action was brought by the plaintiff as a taxpayer to prevent the defendants from granting certain franchises for underground railways in New York for the reason that the defendants had no right under the Constitution to grant such franchises, notwithstanding that the Legislature has conferred on the defendants the right to do the thing against which the plaintiff protested.—*Court of Appeals, Albany, N. Y.*

## DIRECTORY OF MUNICIPAL AND ALLIED SOCIETIES

### May 31-June 1.

HEALTH OFFICERS OF MICHIGAN.—NINTH GENERAL CONFERENCE, UNDER THE AUSPICES OF THE STATE BOARD OF HEALTH, GRAND RAPIDS.—F. Shumway, Secretary, State Board, Lansing, Mich.

### June 5-7.

NATIONAL ELECTRIC LIGHT ASSOCIATION.—ATLANTIC CITY, N. J.—W. C. L. Elgin, Secretary, 136 Liberty Street, New York.

### June 6-7.

NEW YORK STATE ASSOCIATION OF FIRE CHIEFS.—CONVENTION, ELMIRA, N. Y.—H. R. Yates, Secretary, Schenectady, N. Y.

### June 6-8.

MARYLAND STATE FIREMEN'S ASSOCIATION.—CONVENTION AND TOURNAMENT, WESTMINSTER, MD.

### June 11-13.

ASSOCIATION OF AMERICAN PORTLAND CEMENT MANUFACTURERS.—QUARTERLY MEETING, ATLANTIC CITY, N. J.—Earle E. Bottomly, Assistant Secretary, Land Title Building, Philadelphia.

### June 12-15.

MUNICIPAL LEAGUE OF INDIANA, MARION, IND.—John F. Taggart, Secretary, Richmond, Ind.

### June 13-15.

LEAGUE OF GEORGIA MUNICIPALITIES.—ANNUAL CONVENTION, AUGUSTA, GA.—Bridges Smith, Secretary, Macon, Ga.

### June 20-23.

NATIONAL ASSOCIATION OF MASTER STEAM AND HOT WATER FITTERS.—ANNUAL CONVENTION, HOTEL ST. CHARLES, ATLANTIC CITY, N. J.—Henry B. Gomers, Secretary.

### June 21-23.

AMERICAN SOCIETY FOR TESTING MATERIALS.—ANNUAL MEETING, ATLANTIC CITY, N. J.—Edgar Marburg, Secretary, University of Pennsylvania, Philadelphia.

### June 26-29.

AMERICAN SOCIETY OF CIVIL ENGINEERS.—ANNUAL CONVENTION, THOUSAND ISLANDS, NEW YORK.—Charles Warren Hunt, Secretary, 220 West Fifty-seventh Street, New York.

### June 26-28.

NATIONAL INTERSTATE TELEPHONE ASSOCIATION.—Auditorium, Hotel, Chicago, Ill.

### June 27-29.

SMOKE INSPECTORS OF THE UNITED STATES AND CANADA.—FIRST ANNUAL CONVENTION, DETROIT, MICH.—John Fairgrieve, Smoke Inspector, Detroit, Chairman of Committee.

### June 29-July 13.

AMERICAN LIBRARY ASSOCIATION.—TWENTY-EIGHTH CONFERENCE, NARRAGANSETT PIER, R. I.—J. I. Wyer, Jr., Secretary, 10½ Beacon street, Boston, Mass.

### July 10-14.

AMERICAN WATER WORKS ASSOCIATION.—ANNUAL CONVENTION AT BOSTON, MASS.—J. M. Diven, Secretary, 14 George Street, Charleston, S. C.

### July 19-20.

AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS.—SEMI-ANNUAL MEETING, CHICAGO.—W. M. Mackay, Secretary.

### August 15-17.

INTERNATIONAL ASSOCIATION OF MUNICIPAL ELECTRICIANS.—ANNUAL MEETING, NEW HAVEN, CONN.—Frank P. Foster, Secretary, Corning, N. Y.

### September 26-28.

LEAGUE OF AMERICAN MUNICIPALITIES.—TENTH ANNUAL CONVENTION AT CHICAGO.—John MacVicar, Secretary, Des Moines, Iowa.

### October 15-20.

AMERICAN STREET AND INTERURBAN RAILWAY ASSOCIATION AT COLUMBUS, OHIO.



## DIARY OF COMING MUNICIPAL BOND OFFERINGS

DATE	TIME	AMOUNT	Denom- ination.	Int. Rate	Matures Years	PLACE	STATE	PURPOSE	OFFICIAL AND ADDRESS
May 31.	3 p.m.	1,000,000.00	.....	3½	17-22	PITTSBURG.	PA.....	Filtration....	E. S. Morrow, D. C.
"	12 m.	30,000.00	500	4 s.a.	1-20	CADIZ.....	OHIO.....	School.....	Clk. Bd. Education.
"	12 m.	10,000.00	.....	.....	.....	LITTLEF'LLS	MINN.....	Rd. & Bridge.	Town Clerk.
"	"	30,000.00	1000	4 s.a.	14-15	DAYTON....	OHIO.....	Storm Sewer..	Ed. Phillips, City Aud.
"	"	20,000.00	1000	4 s.a.	1-10	"	"	San'try Sewer	"
"	"	168,000.00	100	4 s.a.	20	"	"	Storm Sewer..	"
"	"	10,000.00	.....	6	.....	JAMESON....	"	Bridge.....	D. A. Colpitts, Clk.L.F.
"	"	320,000.00	.....	.....	.....	AUSTIN.....	TEX.....	Water & Lt...	Mayor.
"	12 m.	30,000.00	.....	4 s.a.	10½	CADIZ.....	OHIO.....	School.....	R. R. Beetham, Clerk.
Any date.	.....	150,000.00	.....	.....	40	VANCOUVER.	B. C.....	St. Rd. Bldg..	The Mayor.
"	"	47,500.00	.....	.....	40	"	"	Fire Dept....	"
"	"	277,000.00	.....	.....	20-40	"	"	Paving.....	"
"	"	40,000.00	.....	4½ s.a.	30	BARNESVI'E	MINN.....	Water.....	"
"	"	31,500.00	500	5 a.	20	OSCEOLA....	ARK.....	Water Works	Mayor.
"	"	20,000.00	.....	6 s.a.	20	OKEMAH....	I. T.....	School.....	S. L. O'Bannon, Rec.
June 1.	.....	15,000.00	500	4 s.a.	1-15	RIVER FAL'S	WIS.....	Water Power.	A. P. Weld, Clerk.
"	"	23,000.00	500	4½ s.a.	14	ASHLAND....	ORE.....	.....	M. F. Eggleston, Rec.
"	12 m.	24,000.00	500	5	20-40	ST. MATT'S.	S. C.....	Light.....	L. Cain, Secy. B. P. W.
"	12 m.	5,000.00	.....	6	1-5	COURTLAND.	VA.....	School.....	W. J. Sebrell, Mayor.
"	1 p.m.	12,000.00	.....	Bid..	.....	HARRIS'LE	N. Y.....	School.....	F. W. Werner, Prest.
"	"	30,000.00	.....	4½ s.a.	5-30	SO. FORK...	PA.....	School.....	Jno. C. Penrod, Secy.
"	12 m.	20,000.00	.....	5 a.	20-40	ST. M'HEWS.	S. C.....	.....	Leonidas Cain, Secy.
"	"	20,000,000.00	.....	.....	.....	NEW YORK..	N. Y.....	.....	Comptroller Metz.
"	"	10,000.00	.....	.....	.....	PICTON.....	CANADA..	El. Lt.....	R. A. Norman, Clerk.
"	"	20,000.00	.....	5 a.	5-20	PARIS.....	MO.....	School.....	T. T. Rhodes, Secy.
"	12 m.	12,617.44	.....	4 a.	3½	UTICA.....	N. Y.....	Paving.....	J. A. Cantevell, Clerk.
"	3. 2 p.m.	1,500,000.00	.....	4 s.a.	12	CHICAGO....	ILL.....	Pub. Imp....	L. E. McGann, Compt.
"	4. 8 p.m.	50,000.00	.....	4	20	HASTINGS..	MINN.....	Wr. & Light..	City Clerk.
"	10 a.m.	100,000.00	.....	5 a.	.....	MILW'KEE..	WIS.....	West Sewer..	Paul Bechtner, Compt.
"	10 a.m.	100,000.00	.....	5 a.	.....	"	"	South Sewer.	"
"	10 a.m.	125,000.00	.....	5 a.	.....	"	"	Docks.....	"
"	12 m.	30,000.00	.....	4 a.	5-30	ALBUQUE'UE	N. M.....	City Hall....	H. F. Lee, Clerk.
"	12 m.	54,000.00	1000	4 s.a.	20	CANTON.....	OHIO.....	Fire, etc.....	A. Ashbrook, City Aud.
"	5. 12 m.	27,000.00	.....	5 s.a.	1-25	SHAW.....	MISS.....	W'r & Light..	J. C. Walker, Clerk.
"	12 m.	20,000.00	.....	5 a.	5½	W. P'M B'CH	FLA.....	School.....	G. I. Metcalf, Secy.
"	8 p.m.	80,000.00	.....	5	15½	BISBEE.....	ARIZ.....	Sewer.....	C. W. Hicks, Clerk.
"	8 p.m.	10,000.00	.....	5	21	REIDSVILLE.	GA.....	School Bldg..	The Mayor.
"	12 m.	2,000.00	.....	5 a.	4	ROCKFORD.	OHIO.....	Water Works	F. W. Miller, Clerk.
"	"	2,000.00	500	5 s.a.	4-5	CELINA.....	"	"	J. M. Winters, Clerk.
"	6. 7.30 p.m.	40,000.00	.....	4	10-20	STEELTON..	PA.....	.....	J. D. Young, Sec'y.
"	"	25,000.00	.....	.....	.....	N'THWOOD.	IOWA.....	Drainage....	County Auditor.
"	9. 12 m.	14,000.00	.....	6 s.a.	10-20	C'R D'AL'NE	IDAHO....	School.....	J. A. Andrew, Clerk.
"	11. ....	15,000.00	.....	5 a.	30	TERRA ALTA	W. VA....	Municipal...	F. N. Gandy, Recorder
"	4 p.m.	50,000.00	1000	4 s.a.	10	LINCOLN....	NEB.....	Refunding...	B. C. Fox, Treas.
"	"	5,454.72	.....	4½ a.	1-10	WASEON....	OHIO.....	Imp'ment...	Chas J. Hodges, Clk.
"	"	20,000.00	500	4 a.	1-20	PAINSVILLE.	"	St. Imp.....	F. Blackmore, Treas.
"	12. ....	12,850.00	50 to 400	5	1-10	DELAWARE.	"	Imp'ment...	F. B. King, Aud.
"	14. 12 m.	50,000.00	.....	4 s.a.	17	SANDUSKY..	"	Harbor.....	A. M. Wagner, Aud.
"	12 m.	17,000.00	.....	4 s.a.	10	"	"	Sewer.....	A. M. Wagner, Aud.
"	15. ....	50,000.00	500	4 s.a.	.....	ST. BERN'RD	"	W'r & Light..	Geo. Shroder, Clerk.
"	"	100,000.00	.....	4	20	BURL'TON..	VT.....	Water Ref...	L. G. Grant, Treas.
"	"	39,000.00	.....	4	20	"	"	El. Lt.....	"
"	"	32,000.00	.....	3½	20	"	"	School.....	"
"	"	2,500.00	.....	4½ s.a.	10	MILAN.....	OHIO.....	.....	F. A. Roberts, Clerk.
"	12 m.	50,000.00	.....	4	.....	OMAHA.....	NEB.....	Paving.....	F. E. Moores, Mayor.
"	16. 12 m.	11,000.00	.....	4 s.a.	10-20	BELPRE.....	OHIO.....	Building....	J. V. Athey, Clerk.
"	18. 12 m.	7,000.00	.....	4 s.a.	1-7	BEREA.....	"	School.....	Clerk. Bd. Education
"	"	71,595.00	.....	5 a.	1-12	YOUNGST'N.	"	Imp'ment...	N. J. Davis, City Aud.
"	"	4,400.00	200	4 s.a.	25	N'W R'M'ND.	"	Imp.....	C. T. Bainum, Clerk.
"	19. ....	31,000.00	1000	4½ s.a.	.....	ASHTABULA.	"	School.....	C. E. Peck.
"	21. ....	25,000.00	500	4 a.	.....	NORWOOD..	"	Water Works	W. E. Wichgar, Aud.
"	26. 6 p.m.	25,000.00	1000	5 s.a.	1-25	VACAVILLE.	CAL.....	Sewer.....	E. W. Manual, T'n C'k.
"	28. 4 p.m.	720,500.00	.....	4	40	ST. JOHNS.	N. B.....	Deb.....	H. E. Wardroper, Clk.
July 1. ....	10 a.m.	5,000.00	.....	5 s.a.	5-20	PRAGUE....	NEB.....	Waterworks..	Village Clerk.
"	6. 4 p.m.	35,000.00	.....	4	.....	VANCOUVER.	B. C.....	Imp.....	A. M. McEvoy, Clerk.

## ADVANCE AND WEEKLY CONTRACT NEWS

Relating to Municipal and Public Work—Street Improvements—Paving, Road Making, Cleaning and Sprinkling—Sewerage, Water Supply and Public Lighting—Fire Equipment and Supplies—Buildings, Bridges and Street Railways—Sanitation, Garbage and Waste Disposal—Police, Parks and Miscellaneous—Proposals and Awards

### ADVANCE CONTRACT NEWS

The Municipal Journal and Engineer wishes to obtain, at the earliest possible moment, advance and reliable information respecting all work projected. Any items sent us will be greatly appreciated. On request, copies containing such information will be mailed to you.

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by States.*

### STREET IMPROVEMENTS

**Huntsville, Ala.**—The City Council has sold the \$10,000 6 per cent. street bonds to Luke Matthews, at his bid of \$10,350.

**Bisbee, Ariz.**—A number of street improvements have been recommended.—J. E. Thompson, Board of Commerce.

**Washington, D. C.**—The grading of Albermarle avenue and Pennsylvania avenue from Branch avenue to District line has been recommended; cost, \$14,500.—H. B. F. Macfarland, Commissioner.

**Cairo, Ill.**—It is estimated that the cost of establishing grade on many streets will be about \$65,000.—Mayor Parsons.

**Harris, Ill.**—Plans are being prepared for paving Jefferson avenue.

**Peoria, Ill.**—Nebraska avenue and Pacific avenue will probably be paved.

**Wheaton, Ill.**—Macadamizing, to cost \$200,000, and brick paving, to cost \$50,000, will be done during the summer.—C. A. Prout, City Engineer.

**Indianapolis, Ind.**—Arrangements are being made to pave Twenty-second street.

**Riverside City, Ind.**—An election will be held, June 6, to decide the question of macadamizing Jarrett street.—J. Frank Mann, Clerk.

**Davenport, Iowa.**—It is proposed to open Le Claire street north of Locust street.

**New Orleans, La.**—The opening of Leonidas street has been asked, which necessitates the laying of a crossing by the Mississippi Railroad Company.

**Newton, Miss.**—About \$9,000 will be expended on street improvements during the season.—J. D. Carr, Mayor; Charles L. Wood, City Engineer.

**St. Louis, Mo.**—About \$1,000,000 will be expended in improving and reconstructing streets.

**Cleveland, O.**—A resolution to issue \$70,000 bonds for completing the Edgewater boulevard has passed Council.

**Miamisburg, O.**—The question of paving Pearl and Fourth streets with brick is under consideration.

**Toledo, O.**—An ordinance is before Council to establish the grade of Berry street.

**Chester, Pa.**—The question of paving Fifth street will be decided by Council.

**Lock Haven, Pa.**—Church street will probably be paved with brick.

**Nashville, Tenn.**—The city has voted \$150,000 bonds for the purpose of constructing a street from the wholesale district to the railroad yards.

**Austin, Tex.**—Petitions have been received by the County Commissioners for the opening of two roads in Precinct 4.

**Proposed Work.**—**Bessemer, Colo.**—Sidewalks will be laid on Spruce street.—Street Commissioner Sneath.

**Macon, Ga.**—An ordinance has been passed to call an election to decide the question of issuing \$100,000 paving bonds.

**Chicago, Ill.**—A new street is to be opened in the Twenty-first Ward, from Indiana street to Chicago avenue, east of St. Clair street.

**Joliet, Ill.**—Numerous street improvements will be made, including paving, curbing, laying of street crossings and other work.—Richard J. Barr, Mayor.

**Moline, Ill.**—Plans are under way to pave Second, Eighth and Tenth avenues and Eighteenth street; brick and asphalt will be used.—G. A. Shalberg, City Attorney.

**Michigan City, Ind.**—Plans have been submitted for paving Michigan street; cost, \$19,500.

**Davenport, Iowa.**—Fourth and Brady streets will be paved; cost, \$33,000 and \$1,413, respectively. Arlington and College avenues, Ripley, High and Rock Island streets will also be paved.—Hugo Moeller, City Clerk.

**Letonia, Ky.**—All bids for paving Fourteenth street have been rejected; specifications for paving with macadam and asphalt will be prepared.

**New Orleans, La.**—Chartres street will probably be repaved.

**Detroit, Mich.**—About 13 miles of cement sidewalks will be laid.

**Muskegon, Mich.**—An ordinance has been passed providing for the paving of eight blocks on Western avenue.

**St. Louis, Mo.**—Compton avenue will be improved; recommendations have been received for improving Arkansas avenue and Broadway.

**Atlantic City, N. J.**—An issue of \$50,000 bonds for paving Pacific avenue has been approved.—Mayor Stoy.

**Avalon, N. J.**—Bids will be received for two miles of cement sidewalks.—Gilbert S. Smith, Mayor.

**Niagara Falls, N. Y.**—Plans are being prepared by City Engineer Read, to pave Nineteenth street.

**Pen Yan, N. Y.**—The proposition to borrow \$15,000 for paving Jacob street, carried.

**Fargo, N. D.**—Broadway will be paved.

**Cadiz, O.**—Extensive paving will be done; material not chosen.—R. L. Trimmings, Chairman, Improvement Association.

**Cleveland, O.**—Resolutions have been passed to grade, drain, curb and pave East Seventy-eighth and West Seventy-third streets, Woodland avenue, East Thirtieth and West Thirty-third streets, Eatna Road, Elgin avenue and West Eighth street, with Medina stone and paving brick.—Peter Witt, City Clerk.

**Columbus, O.**—East Broad street will be resurfaced with macadam.

**Dayton, O.**—A resolution has been passed to curb, pave with brick, sheet asphalt, bituminous macadam or creosoted wood block, Main street from L street to the south corporation line.—C. P. Floyd, City Clerk.

**Greenville, O.**—Main street will be improved by grading, curbing and paving.

**Martin's Ferry, O.**—An ordinance has been passed to improve several streets by paving.

**Norwalk, O.**—Benedict avenue will be curbed, graded and paved.—T. P. Kellogg, City Clerk.

**Oak Harbor, O.**—The main road will be macadamized; \$11,000 has been subscribed for the work.

**Youngstown, O.**—Bids are invited for paving Grant street from Elm to Belmont streets.

**Youngstown, O.**—Front street will be curbed and sidewalks will be laid on Jury street.

**Guthrie, Okla.**—Plans are under way to pave six blocks of streets.

**Chester, Pa.**—Seventh and Madison streets will be repaired and other streets improved.

**Memphis, Tenn.**—Bids are invited for grading the parkway from Manassas street to a point near the Louisville and Nashville Railroad tracks.

**Janesville, Wis.**—Sidewalks will be laid on South River street and Western avenue.—James Sennett, Street Commissioner.

**Contracts to Be Awarded.**—**Bridgeport, Conn.**—Bids will be received, June 9, for furnishing and laying about 13,730 square yards of brick, wooden block or bituminous macadam paving on Main street.—W. H. R. DuBois, Chairman, Street Committee.

**Fort Barcanas, Fla.**—Bids will be received, June 5, for constructing concrete walks.—L. S. Chappelle, 1st Lieutenant, Quartermaster.

**Paxton, Ill.**—Bids will be received, May 31, for the following work: 24,422 square yards of brick block pavement, 16,000 lineal feet of combined curb and gutter, 36 catch basins, etc.—C. F. Helman, Secretary, Street Committee.

**Streator, Ill.**—Bids were opened, May 22, for improving West Ninth and Second streets.—P. J. Lucey, C. A. Herbert, J. W. Knox, Board of Local Improvements.

**Michigan City, Ind.**—Bids are invited, June 5, by the Board of Public Works, for paving 25,000 square yards on Ninth street.—H. M. Miles, City Engineer.

**Logansport, Ind.**—Bids will be received, June 5, for paving North street with bitulithic brick.

**Van Buren, Ind.**—Bids will be received, June 1, for paving a large number of streets.

**Topeka, Kan.**—Bids are invited, June 5, for repaving Kansas avenue from Crane street to Tenth avenue with sheet asphalt.—James McCabe, City Engineer; J. H. Squires, City Clerk.

**Louisville, Ky.**—Bids are invited, June 14, for constructing and reconstructing 63 miles of pikes in Jefferson county; estimate, \$175,000.—John Dyer, Supervisor of Roads.

**Portland, Me.**—Bids are invited, June 15, for grading post site, sub-grading roads, relaying railroad tracks, constructing roads, walks, gutters, etc., at Fort Levett.—Capt. A. W. Yates, Quartermaster.

**Cheboygan, Mich.**—Bids are invited, June 5, for street paving; estimate, \$55,000. R. W. Roberts, City Engineer, Saginaw, Mich., has plans.

**St. Cloud, Min.**—Bids will be received, June 4, for one 15-ton steam road roller, f.o.b. cars St. Cloud, one jaw-stone crusher with a capacity of 18 to 20 tons per hour with elevator and screen, and one electric motor.—Henry J. Limperich, City Engineer.

**Morristown, N. J.**—Bids are asked by the Board of Freeholders, June 11, for macadamizing Morristown and New Vernon road, Mountain Avenue road and Sussex and Hamburg turnpikes.—Arthur S. Pierson, City Engineer.

**Albany, N. Y.**—Bids will be opened, June 4, by the Board of Contract and Supply, for improving Judson street, 590 feet, including grading, paving, curbing, sidewalk laying and pipe sewer.—Isidore Wachman, City Clerk; Walter E. Mellus, City Engineer.

**Amsterdam, N. Y.**—Bids are asked, June 5, for grading about two miles on ten streets.—F. E. Crane, City Engineer.

**Buffalo, N. Y.**—Bids are asked, May 31, for macadamizing or paving Willow Lawn place and for repaving six other streets.—F. G. Ward, Commissioner, Public Works.

**Buffalo, N. Y.**—Bids will be received, June 8, for constructing concrete sidewalks.—F. G. Ward, Street Commissioner.

**New York, N. Y.**—Bids will be opened, May 31, for paving with asphalt pavement on concrete foundation, the roadway of Vyse avenue; also for regulating, grading, curbing, etc., various streets in the Borough of Bronx.—Louis F. Haffen, Borough President.

**New York, N. Y.**—Bids will be received, June 5, for constructing cement sidewalks on Livermore avenue between Watchogue Road and Waters avenue.—President of Borough of Richmond, New Brighton, New York.

**Pleasantville, N. Y.**—Bids are asked, June 7, by the Board of Trustees for improving Noble and Washington avenues and Broadway.—W. S. Moore, Village Clerk.

**Ashland, O.**—Bids are invited, June 1, for paving the entire length of Highland avenue.

**Ashland, O.**—Bids will be received, June 1, for grading, paving and curbing Center street.—A. P. Black, Village Clerk.

**Bellaire, O.**—Bids were opened, May 24, for the sale of \$9,000 street improvement bonds.

**Elyria, O.**—Bids will be opened, June 6, for constructing pavement in West River street, also for pavement in East and Washington avenues and Depot street.

**Clarion, Pa.**—Bids are invited, by the Borough Council, June 13, for grading and paving about 15,000 square yards on Main street with vitrified brick.—R. W. Guethoff, Secretary.

**Meadville, Pa.**—Bids are invited, June 6, for grading, paving and curbing streets surrounding Diamond Park.—H. S. Robinson, City Clerk.



**Patton, Pa.**—Bids are asked, June 11, for paving three streets.—H. C. Yerger, Borough Engineer.

**Johnson City, Tenn.**—An election will be held, June 5, to decide the question of issuing \$10,000 5 per cent., 20-year, street improvement bonds.

**Bluefield, W. Va.**—Bids are invited, June 12, for laying 9,600 square yards of brick or block pavement in Bluefield avenue, Bland and Mercer streets.—J. T. Akers, Auditor.

**Superior, Wis.**—Bids will be received, June 1, for laying cement sidewalks on Oakes, Banks, John, Ogden, Hughitt, Hammond, Grand and Baxter avenues and on Fifth street.—B. N. Paddock, Claus Johnson, W. F. Albright, Board of Public Works.

**Contracts Awarded.**—**Sacramento, Cal.**—Clark & Henry, Stockton, have been awarded the contract for repaving K and Second streets.—George N. Kandle, City Surveyor.

**Edwardsville, Ill.**—A contract for 5,200 square yards of brick paving, on Portland cement concrete foundation, and 9,300 feet granitoid combined curb and gutter, at \$35.19, has been awarded to A. F. Franks, of Jacksonville.

**Glencoe, Ill.**—Bids were opened, May 29, for improving Central avenue, requiring approximately 4,475 yards of limestone and granite macadam, 3,500 cubic yards of excavation, laying of 2,320 square yards of sod, catch-basins and brick crossings.—Jacob Schnur, President, Board of Local Improvement.

**Lincoln, Ill.**—The contract for paving sewer streets has been awarded Shirk & Hartnell, at \$35,126.—James C. Greenslate, City Clerk.

**Peoria, Ill.**—The contract for paving Crescent avenue was awarded John McAllister at his bid of \$4,957.59.

**Crawfordsville, Ind.**—Waugh & Buchanan have the contract for paving Wabash avenue with vitrified brick on sand foundation; estimate, \$24,000.—James A. Harding, Surveyor, Montgomery County.

**Louisville, Ky.**—George W. Gosnell and R. Lee Fligg have been awarded contracts for about \$12,000 worth of granitoid and brick sidewalks by the Board of Public Works.

**Alexandria, La.**—The contract for one and one-half miles of sidewalks was awarded The Southern Construction Company of Hattiesburg, Miss.

**Lake Charles, La.**—The Municipal Construction Company, Kansas City, Mo., has been awarded a contract for street paving, at \$69,000.

**Boston, Mass.**—Contracts for building State roads have been awarded as follows: Wm. Sears, East Dennis road in Dennis, \$5,016; O. T. Benedict, Pittsfield, road in Lee, \$2,290; The Lane Quarry Company, Quincy, roads in Wareham, \$5,530.

**Quincy, Mass.**—The Hugh Nawn Manufacturing Company was awarded the contract for grading and resurfacing Furnace Brook Parkway, at \$27,714.

**Detroit, Mich.**—The contract for 300,000 square feet of cement sidewalks has been let to Jno. Archer.

**St. Paul, Minn.**—J. M. Thornton has been awarded the contract for paving North St. Paul road by the County Commissioners.

**Winona, Minn.**—Silas Bradley has secured the contract for macadamizing fourteen blocks on Broadway.

**Buffalo, N. Y.**—Contracts for paving Bond, Perry and Gerhardt streets have been awarded F. V. E. Bardel.

**Toledo, O.**—Street improvements contracts have been awarded as follows: James Sheehan, paving Utica street from Walnut to Lagrange street, at \$4,734, and Mettler and Rosalind streets, from Cherry to Lagrange streets, at \$10,163; Kerlin Bros., paving Hamilton street, from Erie to Ewing street, at \$20,851; Garrigan Bros., paving Page street from Legrange street to Sherman street, at \$12,532.

**Youngstown, O.**—Street improvement contracts have been awarded as follows: Evan J. Davis & Son, brick paving West Rayen avenue from Belmont to Covington streets, at \$6,273; Mullin, Miller & Caldwell, brick paving West Rayen avenue from West avenue to end of street, at \$11,605; and Evan J. Davis & Son, brick paving St. Clair avenue, \$5,304.

**Youngstown, O.**—The contract for street signs has been awarded Youngstown Wire and Iron Company, Birmingham Brothers and O'Neill and the Morris Hardware Company; cost, \$5,203.

**Youngstown, O.**—The following contracts have been awarded: paving Bressett street, Anthony O'Horo; paving Chalmers avenue, James McCarren, of the Pennsylvania Clay Company.

**New Castle, Pa.**—The contract for macadamizing the Wilmington Road has been awarded Funkhouser & Company, of New Brighton.

**Philadelphia, Pa.**—The contract for building a wall and doing paving at the Wissahickon school was awarded to Beeder & Company, at \$7,900.

**Dandridge, Tenn.**—Smith Bros & Jenkins and W. W. Stokeley have been awarded the

contract for constructing 80 miles of pike road in Jefferson county; funds available, \$220,000.

**Memphis, Tenn.**—The contract to extend Riverside Parkway to Overton Park has been awarded Roach & Mannigan; bid from 16 to 19 1-2 cents cubic yard.

**Hillsboro, Tex.**—Stonewall street and the Public Square will be paved; contract has been awarded R. K. Dabney, of Dallas.

**Everett, Wash.**—The contract for paving Hewitt avenue has been awarded George McKenzie, at \$47,000.

**Seattle, Wash.**—Howard avenue, north, is being paved by the Barber Asphalt Paving Company, for \$15,239.

**Spokane, Wash.**—The contract for re-curb, reguttering and constructing sidewalks on Riverside avenue, between Monroe and Chestnut streets, has been awarded J. C. Kennedy, at \$9,600.

**Green Bay, Wis.**—W. N. Andrews, Hamilton, Ohio, has secured the contract for two miles of asphalt paving, at \$82,000.

**Preston, Ont.**—The contract for constructing sidewalks has been awarded W. A. Kirks, for \$3,000.

## ROAD MAKING

**Bloomfield, Ind.**—Bids will be received, July 3, for constructing gravel and macadamized roads in Richland township.—William D. Deekard, County Auditor.

**Indianapolis, Ind.**—Bids will be opened, June 5, for paving several miles of road.—Wm. A. Morris, Auditor, Board of Commissioners.

**Northwood, Iowa.**—Bids will be received, June 6, for the purchase of \$25,000 county drainage bonds.

**Great Falls, Mont.**—The county road near Geyser will be inspected by County Commissioner Bradford and Surveyor Whitten, with a view to grading it.

**Morristown, N. J.**—Bids will be received, June 11, for macadamizing Morristown and New Vernon Road, Mountain Avenue Road, Sussex Turnpike and Hamburg Turnpike.

**Big Springs, O.**—An issue of \$10,000 road bonds has been authorized.

**Columbus, O.**—Bids will be received, June 14, for \$3,000, 6 per cent. free turnpike road improvement bonds.—Jno. Evans, Chairman, Board of Road Commissioners.

**Columbus, O.**—Road improvements have been authorized in Surrit, Lake, Harrison, Jefferson, Guernsey and Muskingum counties.—State Highway Commissioner Houston.

**Napoleon, O.**—Bids will be received, June 19, for \$63,000 road improvement bonds.—F. J. Beck, County Auditor.

**Warren, O.**—Bids will be received, June 9, for \$50,000, 4 per cent. road improvement bonds.—J. C. Hasler, City Clerk.

**Abington, Pa.**—An ordinance has been passed calling for an issue of \$50,000 bonds for road improvements, a township building and other purposes.

**Harrisburg, Pa.**—Bids will be received, June 28, for macadamizing roads in Scott township.

**Tacoma, Wash.**—Bids will be received, June 11, for constructing certain sections of the Cowlitz Pass Road or State Road No. 5, between sections as follows: 48-116; 128-297; 406-773; 800-845; 1365-1540.—W. A. Birlev, C. D. Young and H. H. Tilley, County Commissioners.

## SEWERAGE

**Bridgeport, Conn.**—The Director of Public Works has been directed to cause the construction of sewers, with proper catch-basins in Pembroke street, north from present sewer, north to Boston avenue, and in Holly street, near Bunnell street, east to Bunnell street, a distance of about 300 feet.—E. T. Buckingham, City Clerk.

**Sandersville, Ga.**—The Council is considering the construction of a sewer system.

**Grand Rapids, Mich.**—An appropriation will be asked for a storm sewer in John Ball Park.—J. Boyd Pantlind, President, Board Park Commissioners.

**River Range, Mich.**—It is probable that all bids will be rejected for the purchase of \$15,000 4 1/2 per cent., 30-year sewer bonds, and new ones advertised.

**Barberton, O.**—Bids have been rejected for the sanitary sewer in district No. 1; cost, \$5,000. Bids will be readvertised.

**Columblana, O.**—Plans and specifications are being prepared for a sewer system and disposal plant.—F. G. Bradbury, Columbus, Engineer.

**Cuyahoga Falls, O.**—Plans will be redrawn for constructing a sewer system.—W. J. Los-tetter, Secretary, Board Public Affairs.

**Lisbon, O.**—Sewers will probably be constructed on West Water street and East High street.—I. T. Farmer, Surveyor.

**Toledo, O.**—A bond issue of \$354.85 has been asked for constructing sewer No. 951.—Ambrose A. Moody, President of Council; Oren Dunham, Clerk.

**Wilmington, O.**—A sewer system will probably be installed.

**Chester, Pa.**—The Sewer Committee has recommended advertising for bids for sewers on Highland Terrace, Barclay street, Wilson street and Third street; total cost, about \$3,500.

**Galveston, Tex.**—Authority has been granted to connect No. 4 fire station with the Tenth street sewer.

**Proposed Work.**—**Washington, D. C.**—Service sewers will be constructed on Seventh street, between P and Q streets; also sewer in alley of square 1199 and on Wisconsin avenue between M street and the Chesapeake and Ohio Canal.—H. B. F. Macfarland, Commissioner.

**De Land, Fla.**—The city has voted to issue \$12,500 sewer bonds.

**Thomasville, Ga.**—Plans are being made for the proposed sewer extension.—H. S. Jandoff, Engineer.

**Quincy, Ill.**—Plans are under way for constructing sanitary sewers; cost, \$30,000.—Fred Hancock, City Engineer.

**Michigan City, Ind.**—Plans have been submitted for the South side trunk sewer; cost, \$180,000.

**Des Moines, Iowa.**—Bids will be received for constructing the Union Park and Grand View sewer system.—Geo. D. Dolson, City Engineer.

**Richmond, Minn.**—The citizens have voted to issue \$8,000 sewer and water bonds.

**Two Harbors, Minn.**—Preliminary plans are under way for a main sewer in East Two Harbors.—Thos. McGilvray, Duluth, Engineer.

**St. Louis, Mo.**—A sewer inlet will be constructed on Nebraska avenue at Winnebago street.

**St. Louis, Mo.**—Bids will be received for reconstructing the Rocky Branch sewer, for which an appropriation of \$125,000 has been made.

**Summit, N. J.**—Plans are being prepared for a sewerage pumping station and a sewerage tank.

**Cleveland, O.**—Plans are under way to install a sewerage filtration plant in the gully spanned by the South Brooklyn bridge; the municipal lighting plant will be constructed on the opposite side.

**Salem, O.**—Sewers will be constructed in East Fourth street and Broadway.—George Holmes, Village Clerk.

**Willoughby, O.**—A sewerage system will be constructed.—J. C. Ward, Engineer.

**Madison, Wis.**—Sewers will be constructed in the Winnebago street district.—O. S. Norsman, City Clerk.

**Contracts to be Awarded.**—**Pensacola, Fla.**—Bids will be received, June 6, for installing a sewer system at the Santa Rosa Quarantine Station.—James Knox Taylor, Supervising Architect, Washington, D. C.

**Boise City, Ida.**—Bids will be received, June 2, for laying a lateral sewer, manholes, etc., in District 104.—Emily L. Savidge, City Clerk.

**Grand Rapids, Mich.**—Bids will be received, June 6, for constructing a 27-inch brick sewer.—F. G. Ward, Commissioner, Public Works.

**Grand Rapids, Mich.**—Bids will be received, June 15, for constructing the South End sewer.—Jas. E. Keegan, President, Board Public Works.

**Cape Girardeau, Mo.**—Bids will be received, July 2, for constructing a sewer system in District 1.

**Laurinburg, N. C.**—Bids will be received, June 15, for installing a sewer system.

**Cincinnati, O.**—Bids will be received, June 12, for laying about 4,750 lineal feet pipe, special castings and valves, in Queen City avenue, also about 4,300 lineal feet pipe in Hewitt and Woodburn avenues.—G. H. Benzenburg, Engineer.

**Elyria, O.**—Bids will be opened, June 6, for constructing sewers; one to begin at Winckles street and run to the Lake Shore road.

**Lancaster, O.**—Bids will be opened, May 31, for constructing a sewer in Fifth avenue.—Geo. Cunningham, Clerk.

**Mayersdale, Pa.**—Bids will be received, June 4, for constructing 2,400 feet of sewer.—W. A. Shoemaker, Secretary, Sewer Committee.

**North Braddock, Pa.**—Bids will be received, May 31, for constructing sewers in several streets.—C. A. Stewart, Borough Engineer.

**Waukesha, Wis.**—Bids will be received, June 1, for constructing sewers in several streets.

**Waukesha, Wis.**—Bids will be opened, June 1, for constructing sewers on College and Hartwell avenues.

**Contracts Awarded.**—**Bellaire, Ill.**—The contract for constructing a sewer system has been awarded Reeb Bros., at \$43,117.

**Lincoln, Ill.**—The contract for constructing 623 feet of 12-inch sewer has been awarded David Mitchell.

**Marion, Ind.**—The contract for constructing the Nelson street sewer has been awarded S. M. Grandy.



**Pipestone, Minn.**—The contract for constructing sewers has been awarded W. E. Young, at \$2,470.

**St. Louis, Mo.**—The contract for installing septic tank system has been awarded Louis & Kitchener, Chicago, Ill., at \$15,636.

**Norwich, N. Y.**—The contract for constructing about 1,500 feet of 10-inch sewer and 14,000 feet of 8-inch sewer, at \$14,541, has been awarded C. H. Queareau, of Oxford.

**Hillsboro, N. Dak.**—The contract for constructing a trunk sewer has been awarded Gil Haggart, at \$15,000.

**Lorain, O.**—The contract for the Woodville sewers has been awarded Faragher & Randall, at their bid of \$8,035.

**Reading, Pa.**—The contract for installing concrete sewer in Oley street and on Schuylkill avenue has been awarded the Hawman Construction Company, at \$12,626.

**Richmond, Va.**—The contract for constructing a sewer has been awarded Thomas W. Barry & Company, at \$10,000.

## WATER SUPPLY

**Oakland, Cal.**—The Contra Costa Water Company is reported to have increased its capital from \$5,000,000 to \$6,000,000. The towns of Point Richmond, Port Costa and Martinez will be supplied with water.

**Trinidad, Colo.**—Waterworks extensions, amounting to \$175,000 or \$200,000, will be made.

**Toccoa, Ga.**—The citizens have voted to issue \$35,000 waterworks bonds.

**Caldwell, Ida.**—The citizens have voted to issue \$25,000 water bonds.

**Donovan, Ill.**—A waterworks plant will be installed.

**Sulphur, I. T.**—A waterworks plant is proposed.

**Albia, Iowa.**—A bond issue of \$36,000 has been voted for waterworks construction.—T. J. Baird, City Clerk.

**Council Bluffs, Iowa.**—It is recommended that a waterworks plant be constructed; the question will be voted on by the citizens.

**Marquette, Kan.**—An election will be held to vote on the issuing of \$8,000 for a waterworks plant.

**Paducah, Ky.**—Waterworks bonds will probably be issued.

**Hammond, La.**—A special election will be held, June 4, to vote on the question of issuing \$40,000 waterworks bonds.

**Mapleton, Minn.**—A meter system will probably be installed by the Waterworks Department.

**Red Wing, Minn.**—A plan is on foot to filter water by electricity.

**Troy, N. Y.**—The citizens will vote on the proposition to issue \$250,000 waterworks bonds.

**Lockport, N. Y.**—The proposed water supply system will cost \$500,000.—Julius Freshet, City Engineer.

**Ashtabula, O.**—An issue of \$175,000 waterworks bonds will shortly be advertised.

**Dayton, O.**—The Council will purchase the land forming the bed of Mad river to secure water supply for the city.

**Elyria, O.**—Water mains will probably be laid; a bond issue of \$50,000 has been authorized.

**Newark, O.**—The Board of Public Service is considering the construction of a concrete reservoir system.

**Zanesville, O.**—Improved waterworks has been petitioned by the Board of Public Service.

**Eugene, Ore.**—A waterworks system is being planned, including a 1,000,000 gallon reservoir.

**Anderson, S. C.**—The power house of the Anderson Water, Light and Power Company, at Portman Shoals, has been destroyed by fire.

**Fort Francis, Ont., Can.**—A system of waterworks, sewerage and electric lights will be installed; probable cost, \$57,000.—John Galt, Toronto, Consulting Engineer.

**Ottawa, Ont., Can.**—The City Council has asked for authority to expend \$100,000 for a waterworks system.

**Proposed Work.—Russellville, Ark.**—The erecting of a waterworks plant is being considered.

**Marysville, Cal.**—The Yuba city waterworks have been purchased by outside capitalists, who will improve the plant.

**Gunnison, Colo.**—An issue of \$1,000 water and light bonds will be made.

**Joliet, Ill.**—Water mains will be laid in St. Louis street.—H. A. Stevens, Engineer, Board of Local Improvement; Matt Berscheid, City Clerk.

**Hagerstown, Ind.**—An expenditure of \$15,000 for a waterworks plant has been authorized.

**Chickasha, I. T.**—An issue of \$60,000 water and sewer bonds has been authorized.

**Frederick, I. T.**—A bond issue has been voted for waterworks construction.

**La Fayette, La.**—The water and lighting system will be extended; cost, \$35,000.

**Palmer, Mass.**—A waterworks system will be established; cost, \$200,000.

**Munising, Mich.**—A bond issue of \$30,000 for waterworks and electric-light plant has been authorized.

**Hastings, Minn.**—A resolution has been adopted calling for an issue of \$50,000 waterworks bonds.

**Richmond, Minn.**—Plans are being prepared and bids will be asked for constructing a \$30,000 water system.

**Torah, Minn.**—An issue of \$15,000 water bonds has been authorized.

**Mitchell, Neb.**—Bids will be received for constructing about 135 miles of distributing system, including about 720,000 cubic yards of earth work and 11,000 cubic yards of rock work.—E. A. Hitchcock, Secretary, Reclamation Service, Washington, D. C.

**Hamburg, N. Y.**—Water mains will be laid on several streets and a reservoir will be built at the pumping station; cost, \$6,000.

**Rome, N. Y.**—An 8-inch water main will be laid on Dextater street.

**Fremont, O.**—The Fremont Waryan Company will issue \$75,000 water extension bonds.

**Tecumseh, Okla.**—The proposition to issue \$60,000 water and light bonds carried.

**Seattle, Wash.**—An order has been placed for 1,300 water meters, at a cost of \$13,000.

**Milwaukee, Wis.**—The immediate construction of an additional 20,000,000 gallon pumping engine at North Point Station is recommended by the City Engineer.

**Calgary, N. W. T., Can.**—The City Council has authorized the laying of seven miles of water mains.

**Contracts to be Awarded.—Pottlach, Ida.**

Bids will be received, June 20, for constructing waterworks.—Address Pottlach Lumber Company, Palouse, Washington.

**Marion, Ind.**—Bids will be received, June 4, for water well, electric motor and well house, in accordance with specifications.—Jno. Q. Adams, Treasurer, N. H. D. V. S.

**Fort Banks, Mass.**—Bids will be received, June 4, for laying mains and remodeling the water distributing system.—Capt. Geo. L. Goodale, Quartermaster, Boston.

**Springlake, Mich.**—Bids will be received, July 1, for constructing waterworks system.—A. L. Holmes, Grand Rapids, Engineer.

**Wyandotte, Mich.**—Bids will be received, June 6, for 4½ miles of 6 and 8-inch water mains.

**Prague, Neb.**—Bids will be received, June 1, for constructing a waterworks plant; cost, \$6,000.

**Laurinburg, N. C.**—Bids will be received, June 15, for installing a waterworks system.

**Philadelphia, Pa.**—Bids will be received, June 20, for pumping station, pump walls, and foundation at the Torresdale filtration plant.—Thomas L. Hicks, Director of Public Works.

**Fort Brown, Tex.**—Bids will be received, June 15, for constructing an extension to the water distributing system.—Robert R. Stevens, Quartermaster.

**Dallas, Tex.**—Bids were opened, May 22, for furnishing 11 cars of 6-inch cast-iron water pipe and one car of 4-inch cast-iron water-pipe.—J. B. Winslett, Secretary, Board of Waterworks.

**St. Croix Falls, Wis.**—Bids will be received, May 31, for constructing waterworks system, also for furnishing cast-iron water pipes and hydrants and concrete reservoir.—Elmer Comer, Village Clerk.

**Contracts Awarded.—San Francisco, Cal.**

The Canton Pump Company, Canton, O., has been awarded the contract for a carload of pumps.

**Newton, Conn.**—Contracts for constructing waterworks have been awarded as follows: Reservoir and pipe laying, Leonard L. Beckwith, Ridgefield, Conn.; Pipe valves and hydrants, R. D. Ward & Company, Philadelphia, Pa.; engine and pump, W. B. Glover, Newton; cement, Warner Miller Company, New Haven.

**Buena Vista, Ga.**—The contract for constructing a waterworks system has been awarded J. B. McCrary, Atlanta, for \$14,250.

**Dawson, Ga.**—Contracts for the waterworks system have been awarded as follows: R. D. Cole Manufacturing Company, Newman; Herron Pump and Foundry Company, Chattanooga, Tenn., and Laidlaw-Dunn-Gordon Company, of Cincinnati, O.

**Dracut, Mass.**—The contract for laying water pipe has been awarded Long & Little Company, Leominster, Mass., for \$17,000.

**Moss Point, Miss.**—The waterworks plant will be built by Judge O. Randell, Scranton, Miss.

**Glendive, Mont.**—The contract for constructing a waterworks system costing \$40,000 has been awarded Green Brothers & Company.

**Bowling Green, O.**—The Platt Iron Works Company, Dayton, O., has been awarded the contract for a 3,000,000 gallon vertical twin-compound pumping engine of 120,000,000 duty.

**Fostoria, O.**—The contract for the waterworks filtration plant has been awarded J. H. Jones, at \$1,018.

**Wyoming, O.**—The contract for relining the reservoir has been awarded C. E. Jones, of Lebanon, at his bid of \$7,500.

**Oklahoma City, Okla.**—The successful bidders for waterworks contracts were: The Eagle Ironworks, Kansas City, Mo.; Prescott Pump Company, Milwaukee, Wis.; Weber Chimney Company, Kansas City, Mo., and the Greer Filter Company, Philadelphia, Pa.

**Edgemont, S. D.**—Franchise has been granted to S. S. Thompson, of Philadelphia, Pa., to construct a water system.

**Gleason, Tex.**—The Gleason Water and Lighting Company has been granted a franchise to install water and lighting plant.

**Kenosha, Wis.**—The Chicago Bridge and Iron Company has been awarded the contract for constructing a water tank, at a cost of \$18,000.

**Kamloops, B. C., Can.**—The contract for waterworks supplies has been awarded T. H. Leeming.

## PUBLIC LIGHTING

**Denver, Col.**—The Northern Colorado Power Company has increased its capital to \$3,000,000. A power plant will be built at Lafayette to furnish electric-light service to various towns.—Directors, William J. Barker, Thomas Keeley, Charles Bromley, and others.

**Edgewood, Ga.**—The question of issuing bonds for a lighting plant will be submitted to a vote of the people.

**Camp Point, Ill.**—An election will be held to decide the question of issuing \$10,000 municipal light bonds.

**Marquette, Kan.**—An election will be called to vote on issuing \$4,000 bonds for an electric-light plant.

**Midway, Ky.**—The electric-light franchise has been purchased by a Louisville company.

**Paducah, Ky.**—A proposition to issue electric-light bonds will be voted on.

**Mayer, Minn.**—Bonds are proposed for a lighting plant.

**Newton, N. J.**—An electric-light plant will probably be erected at Glenmere.

**Jamestown, N. Y.**—The matter of establishing an electric-light plant is being considered.

**Winston-Salem, N. C.**—The Gas and Lighting Company has been purchased by Williams & Sinclair, Mainland, Oshkosh, Wis.

**Grand Forks, N. D.**—A 75-light capacity dynamo will probably be purchased for the electric-light plant.

**Minnewaukon, N. D.**—An electric-light plant is being considered.

**Bryan, O.**—A municipal lighting plant is under consideration; cost, \$28,000.

**Cleveland, O.**—The Cleveland Electric Illuminating Company has increased its capital to \$5,000,000.

**Hamilton, O.**—Bonds will probably be issued for repairs to the city gas works; cost, \$55,000.

**Falls City, Ore.**—The Luckiamite Valley Water and Electric Manufacturing Company has been granted a franchise to operate an electric-light and power plant.

**Taylor, Pa.**—The Council is considering an electric-light plant.

**Strawn, Tex.**—It is reported that an electric-light plant will be established.

**Milwaukee, Wis.**—The Milwaukee Gas Light Company will enlarge its plant.

**West Milwaukee, Wis.**—An electric-lighting system will probably be installed.—Geo. Breu, Village President.

**Kingston, Ont., Can.**—An election will be held, May 31, to vote on extending the lighting plant; cost, \$85,000.

**Proposed Work.—Social Circle, Ga.**—Bonds will be issued for an electric-light plant.

**Camp Point, Ill.**—The citizens have voted to issue \$10,000 bonds for an electric-light plant.

**Harper, Kan.**—The electric-light plant will cost about \$12,000.

**Wichita, Kan.**—The Wichita Gas, Electric-light and Power Company will erect a plant.—Henry C. Scott, St. Louis, Mo., Manager.

**Covington, La.**—The electric-light plant will be improved.

**Fremont, O.**—The hot water electric-light plant will probably be extended and improved.

**Abington, Pa.**—An appropriation of \$2,000 has been made for street lighting.

**Topton, Pa.**—An electric-light plant will be installed.

**Aberdeen, S. D.**—An ordinance has been passed to issue \$35,000 electric-light bonds.

**Lynchburg, Va.**—The establishing of a municipal lighting plant is recommended; cost, \$50,000.

**Lander, Wyo.**—The Wyoming Power and Light Company has organized to furnish Lander, South Pass, Atlantic, Fort Washakie, Arapahoe Agency and other points with electric power.

**Contracts to be Awarded.—Fort Totten, N. Y.**—Bids will be received, June 12, for installing electric-light fixtures in thirteen buildings.—Capt. G. H. McManus, Constructing Quartermaster.

**Fort Sam Houston, Tex.**—Bids will be received, June 14, for furnishing electric current for illuminating and small motor purposes; also for constructing and installing an interior and exterior electric-light system.—L. J. Fleming, Constructing Quartermaster.

**Contracts Awarded.—Gadsden, Ala.**—An electric-lighting and power plant will be built by the Gadsden Railway, Light and Power Company; cost, \$290,000.

**New Orleans, La.**—The contract for installing electric-light and water plant has been awarded to Prof. Eugene Campbell, of Oxford.

**Hersey, Mich.**—The contract for an electric-light system has been granted F. McIntyre.

**Cincinnati, O.**—The contract for the natural gas plant has been awarded the Cincinnati Gas and Electric Company.

**Dunmore, Pa.**—The contract for the electric power plant has been awarded Woleken, Beilmann & Bitzelman.

**Washington, Pa.**—The lighting contract has been relet to the Washington Electric Light and Power Company.

**Manassas, Va.**—An issue of \$50,000 has been voted for electric-lights, sewers and street improvements. Bids will shortly be asked.

**Virginia Beach, Va.**—The Council will soon issue \$30,000 bonds for making light, waterworks, sewer and other improvements.

**Pasco, Wash.**—Contracts for constructing an electric-light and water system have been awarded F. E. Elmendorf, of Spokane.

### FIRE EQUIPMENT AND SUPPLIES

**Little Rock, Ark.**—The Council has been petitioned to improve the fire protection.

**Chicago, Ill.**—The matter of securing improved fire protection is being agitated by the Chicago Commercial Association.

**Hagerstown, Md.**—Plans are being prepared for an engine house.—Harry E. Yessler, York, Pa., Architect.

**Springfield, Mass.**—The Fire Commissioners recommend the purchase of a fire engine to replace the Bond street engine.

**Ann Arbor, Mich.**—The Fire Commissioners recommend the purchase of a fire engine and an aerial truck.

**Onsted, Mich.**—The fire protection will probably be improved.

**Humboldt, Neb.**—The Slama Fire Protection Company has been incorporated; capital, \$90,000.

**North Bergen, N. J.**—Five independent fire companies have been organized; apparatus will be purchased.

**Tarentum, Pa.**—A volunteer fire company has been organized.—Dr. S. M. Kennedy, President.

**Wenatchee, Wash.**—The Fire Committee of the Council recommends improving the fire protection.

**Wenatchee, Wash.**—The Fire Committee recommends installing a system of telephone calls.—Charles Harlin, Chairman of Committee.

**Proposed Work.—Fitzgerald, Ga.**—It is proposed to improve the fire protection.

**Providence, I. T.**—An appropriation of \$50,000 has been made for a fire station in the Fifth ward, and \$70,000 for a fire station in the Second and Eighth wards.

**Buffalo, Minn.**—A fire company has been organized and fire apparatus will be purchased.

**Waite Park, Minn.**—The Council proposes to secure fire protection.

**West Concord, Minn.**—Fire apparatus will be purchased.

**Butler, Mo.**—A fire station will be erected; hose, cart and other apparatus will be purchased.

**Bridger, Mont.**—Fire apparatus will be purchased.

**Depew, N. Y.**—It is proposed to improve the fire protection.

**New York, N. Y.**—An appropriation of \$1,625,000 has been asked for a fire alarm system in Manhattan Borough.—J. H. O'Brien, Fire Commissioner.

**Bristol, R. I.**—Hydraulic Engine Company will purchase uniforms.

**North Yakima, Wash.**—The Council has appropriated \$3,000 for improving fire protection. Two thousand feet of hose, an aerial truck and one chemical engine will be purchased.

**Enderlin, N. D.**—Plans are complete for erecting a new Fire Hall; estimated cost, \$3,000.

**Chippewa Falls, Wis.**—Caps and belts will be purchased for the firemen.

**Tunisfall, Alta, Canada.**—A chemical engine and fire apparatus will be purchased and a fire house will be erected.

**Contracts to be Awarded.—New York, N. Y.**—Bids will be received, June 6, for erecting additions and altering quarters of Engine Company 133, Borough of Brooklyn. John H. O'Brien, Fire Commissioner.

**New York, N. Y.**—Bids will be received, June 6, for additions and alterations to the engine house located at 165 West Twenty-ninth street, Manhattan.—Nicholas J. Hayes, Fire Commissioner.

**Portland, Ore.**—Bids will be received, June 2, for furnishing four third-class fire engines and four hose wagons.

**Fort Casey, Wash.**—Bids will be received, June 6, for constructing a fire station.—Constructing Quartermaster.

**Crows Nest, Alta, Canada.**—Bids were opened, May 28, for constructing a brick engine house.—N. E. Brooks, Division Engineer, Calgary.

**Lethbridge, Alta, Canada.**—Bids were opened, May 28, for constructing a brick engine house.—N. E. Brooks, Division Engineer, Calgary.

**MacLeod, Alta, Canada.**—Bids were opened, May 28, for a brick engine house.—N. E. Brooks, Division Engineer, Calgary.

**Medicine Hat, Alta, Canada.**—Bids were opened, May 28, for a brick addition to the engine house.—N. E. Brooks, Division Engineer, Calgary.

**Red Deer, Alta, Canada.**—Bids were opened, May 28, for a brick engine house.—N. E. Brooks, Division Engineer, Calgary.

**Winnipeg, Man., Canada.**—Bids will be received, June 4, for supplying two 500-horse-power electric generators, switchboards for high-pressure, fire-service waterworks.—H. N. Ruttan, City Engineer; C. J. Brown, City Clerk.

**Contracts Awarded.—Chicago, Ill.**—The city will expend \$329,000 for new Fire Department buildings.

**Providence, R. I.**—A resolution has been approved to expend \$70,000 for building a new fire station in the Fifth Ward.

**Chattanooga, Tenn.**—The contract for plumbing, heating and gas fitting at the Ninth Ward fire hall has been awarded Tom Wilcox Plumbing and Supply Company.

### MUNICIPAL BUILDINGS

**Montgomery, Ala.**—An appropriation of \$14,250 for the purchase of school property has been asked.—C. P. Hardaway, City Clerk.

**Bisbee, Ariz.**—An election will be held, June 4, to decide the question of improving the Lowell, South Bisbee and Don Luis schools.

**Pueblo, Col.**—The citizens are agitating for a new Courthouse; estimated cost, \$300,000.

**Washington, D. C.**—Plans are being prepared by the Board of Regents, Superintendent Green and the Congressional Commission for erecting a new National Museum in the Mall. The structure will be a three-story, 510 x 320 foot building and will cost about \$2,500,000.

**Challis, Ida.**—An election will be held, June 4, to decide the question of issuing school bonds.

**Burnside, Iowa.**—Plans are being prepared to erect a school building.

**Sabetha, Kan.**—Plans for a \$10,000 high school have been prepared by William F. Schrage, Kansas City, Mo.

**London, Ky.**—A bond issue of \$8,000 for schools will be voted.

**La Fayette, La.**—A City Hall will be erected at a cost of \$5,000.

**New Bedford, Mass.**—The corner of Hemlock and Thompson streets has been recommended as a site for the primary and grammar schools.

**Bruce, Minn.**—The proposition to issue bonds for a Town Hall will be submitted to a vote of the people.

**Bonno Torro, Mo.**—A school building will probably be erected.

**New York, N. Y.**—The issue of \$8,000,000 bonds for school buildings has been authorized by the Board of Estimate; of this amount \$4,500,000 will have to be approved by the Board of Aldermen.

**Oneida, N. Y.**—A heating plant has been asked for the Elizabeth street school; the sum of \$4,000 has been set aside.—C. Herman Phillips, School Commissioner.

**Dillonvale, O.**—An election will be held, June 9, to decide the question of issuing \$6,000 Town Hall bonds.

**Franklin, Pa.**—The erection of a county jail is recommended by the Grand Jury.

**Malone, Tex.**—An election will be held, June 4, to decide the question of issuing \$7,000 school bonds.

**Temple, Tex.**—An election will be held to decide the question of issuing of \$25,000, 5 per cent., school bonds.

**Monroe, Utah.**—An election will be held to decide the question of issuing school bonds.

**Sewell's Point, Va.**—Parker and Thomas, Baltimore, Md., have been commissioned to prepare plans for the State of Maryland Building at the Jamestown Exposition.

**Chehalis, Wash.**—The proposition to issue school bonds will be submitted to a vote of the people, June 4.

**Wenatchee, Wash.**—The proposition to issue \$12,000 municipal building bonds was defeated.

**Aylmer, Ont., Canada.**—The erection of a Town Hall is being considered.

**Proposed Work.—Santa Monica, Cal.**—An issue of \$6,000 school bonds has been voted.

**Brunswick, Ga.**—Bids are readvertised, June 26, for erecting a Courthouse; cost, \$75,000.—Gifford and Betts, New York, Architects.

**Thomasville, Ga.**—The City Hall will be remodeled at a cost of \$2,000.

**Dixon, Ill.**—Plans have been accepted for the erection of a \$20,000 City Hall and engine house.

**Virginia, Ill.**—An expenditure of \$20,000 for school heating apparatus has been approved.

**Bokchito, I. T.**—A bond issue of \$6,000 has been voted for a school building.

**Haskell, I. T.**—An issue of \$10,000 school bonds has been authorized.

**Stigler, I. T.**—An issue of school bonds will be made.

**Louisville, Ky.**—Bids are asked for constructing a Coliseum at Fourth and A streets.—James B. Camp, Manager; Brinto B. Davis, Architect.

**La Fayette, La.**—The issuance of \$60,000 school bonds has been authorized.

**Centreville, Miss.**—An issue of \$12,500 school bonds has been voted.

**Vicksburg, Miss.**—Bids will be readvertised for the purchase of \$50,000 jail bonds.

**Yazoo City, Miss.**—Bids will be received for constructing a City Hall.—R. H. Hunt, Chattanooga, Tenn., Architect.

**Joplin, Mo.**—The proposition to issue \$45,000 school bonds has been voted favorably.

**Kansas City, Mo.**—Two school buildings will be erected, one in Quindara at a cost of \$12,500, the other in Grandview, at a cost of \$8,000.

**West Seneca, N. Y.**—The citizens have voted to issue \$17,500 in bonds for erecting three schools.

**Columbus, O.**—Plans and specifications have been received for a post exchange building at the Barracks.—Captain Chamberlain, Constructing Quartermaster.

**Millville, Pa.**—The sum of \$12,000 has been voted for a school building.

**Fort Bliss, Tex.**—Bids will shortly be asked for constructing buildings.—Lieut. Chas. O. Shult, Post Quartermaster, Constructing Quartermaster.

**Marshall, Tex.**—Plans are invited for a City Hall and Market House combined.

**Omaha, Tex.**—The issue of \$75,000 school bonds has been approved by the Attorney-General.

**Temple, Tex.**—An issue of \$25,000 school bonds will be made.

**Norfolk, Va.**—Plans have been prepared for two school buildings at Omohundro avenue and Chapel street; probable cost, \$55,000.

**Cardston, Alta, Canada.**—An appropriation of \$10,000 has been made for a Courthouse.

**Hintonburg, Ont., Canada.**—The school-house will be rebuilt.

**Contracts to be Awarded.—Gadsden, Ala.**—An election will be held, June 18, to decide the question of issuing \$15,000 school bonds.

**Keams Canon, Ariz.**—Bids will be received, June 5, for constructing a stone hospital at the Moqui School.—C. T. Larrabee, Acting Indian Commissioner, Washington, D. C.; Theo. G. Lemmon, Superintendent, Keams Canon.

**Oakland, Cal.**—Bids will be received, May 31, for furnishing supplies to the Educational Department, for the year ending June 30, 1907.—Walter B. Fawcett, Secretary, Board of Public Works.

**Washington, D. C.**—Bids will be received, June 14, for constructing a wharf and laundry at the Quarantine Station at Savannah, Ga.—James Knox Taylor, Supervising Architect, Washington, D. C.

**Washington, D. C.**—Bids will be received, June 14, for furnishing and delivering materials necessary for constructing a brick dormitory at the Tomah School, Wisconsin.—L. M. Compton, Superintendent, Tomah, Wisconsin; Department Indian Affairs, Washington, D. C.

**Brunswick, Ga.**—Bids will be received, June 26, for constructing a Courthouse.—J. J. Lott, Chairman County Commissioners; A. O. Townsend, Clerk.

**New Orleans, La.**—Bids will be received, June 5, for a brick school building.—George P. Brandt, Clerk, Board of Education.

**Pass Christian, Miss.**—Bids will be received, June 5, for erecting a brick school building.—Geo. P. Brandt, Clerk.

**Joplin, Mo.**—Bids were opened, May 24, for constructing three school additions, as follows: four rooms Eugene Field School, two rooms to the Webster School.—J. T. Aldridge, Secretary, Board of Education.



**Exeter, Neb.**—An election will be held, June 4, to pass on issue of \$5,000 school bonds.

**New York, N. Y.**—Bids will be received, June 12, for installing a hydraulic plunger freight elevator in the U. S. Postoffice and Courthouse.—James Knox Taylor, Supervising Architect, Washington, D. C.

**New York, N. Y.**—Bids will be received, June 4, for alterations and repairs for public schools 2, 29, 40, 46, 58, 77, 80, 90, 97, 102 annex, 105, 120, 124, 130 annex, 131, 139, Borough of Brooklyn.—C. B. J. Snyder, Superintendent, School Buildings.

**New York, N. Y.**—Bids will be received, June 4, for installing electric equipment in public school 69, Borough of Manhattan.—C. B. J. Snyder, Superintendent, School Buildings.

**New York, N. Y.**—Bids will be received, June 4, for installing steam-heating system in the new addition to the City Hospital.—Robt. W. Hebbard, Commissioner, Department of Public Charities.

**New York, N. Y.**—Bids will be received, June 5, for erecting a two-story frame shack on the grounds of the sanitarium at Otisville, Mount Hope, New York.—Thomas Darlington, M.D., President, Board of Health.

**Jackson, O.**—Bids will be received, June 1, for \$40,000, 3 1-2 per cent., Jackson County Infirmary bonds.—W. J. Shumate, County Auditor.

**Lima, O.**—Bids will be received, June 4, for erecting a school building.—G. A. Herralt, Clerk, Board of Education.

**Johnson City, Tenn.**—An election will be held, June 5, to decide the question of issuing \$17,500, 5 per cent., 20-year school bonds.

**Snyder, Tex.**—Bids will be received, June 1, for erecting a school building.—E. B. Barnes, Secretary, Board of Education.

**Fort Ethan Allen, Vt.**—Bids will be received, June 4, for constructing a hay shed. Capt. W. E. Cole, Quartermaster, Burlington, Vt.

**Contracts Awarded.**—**Fort Smith, Ark.**—The contract for the Bellegrave school has been awarded Zimmerman and Jones for \$8,990.

**Ashburn, Ga.**—The contract for the jail building has been awarded Wagner and Dodson, Montgomery, Ala.

**Junction City, Kan.**—The contract for plumbing and heating five buildings at the Army Post has been awarded Hurley & Co., St. Paul, Minn.

**Marion, Kan.**—Falk and Company, McPherson, have been awarded the contract for plumbing and heating the Courthouse.

**Louisville, Ky.**—The contract for plumbing the Marine Hospital has been awarded Benjamin J. Watts, at a cost of \$3,500.

**St. Joseph, La.**—The contract for plumbing and heating the jail and Courthouse has been awarded H. W. Newman, Louisville, Ky.

**Grand Rapids, Mich.**—The contract for installing shower baths in the Michigan National Guard Building has been awarded Sproul and McGurkin.

**Purvis, Miss.**—The contract for plumbing Courthouse and jail has been awarded H. W. Newman, Louisville, Ky.

**New York, N. Y.**—The contract for plumbing hospital pavilions Nos. 1 and 2, Swinburne Island, has been awarded T. J. Cronin, Binghamton, N. Y.

**Syracuse, N. Y.**—Bids were opened, May 21, for the purchase of \$50,000 North Side school bonds.—R. J. Shanahan, Comptroller.

**Cincinnati, O.**—The contracts for plumbing in the Clifton school and the high school on Baymiller street have been awarded William Hillenbrand and Company.

**Columbus, O.**—The contract to prepare plans for the school at Grogan has been awarded W. T. Mills, Architect.

**Science Hill, O.**—The contract for erecting a high school building has been awarded F. Haloch, Youngstown, O.

**Guthrie, Okla.**—The contract for heating Federal Building has been awarded Bosworth, Hahn and Company, Wichita, Kan.; cost, \$4,048.

**Beechview, Pa.**—The contract for a school building has been awarded Snee Brothers, Knoxville, Pa.; cost, \$16,500.—Henry S. Fisher, Pittsburg, Pa.

## POLICE

**Louisville, Ky.**—The erection of a police station is under consideration.

**St. Louis, Mo.**—Plans have been approved for erecting a three-story building for headquarters for Police Department.

**Cleveland, O.**—The Eighth Precinct Police Station will be repaired through efforts of Judge Adams.

**Chippewa Falls, Wis.**—The City Clerk has been directed to purchase caps and belts for the policemen.

## BRIDGES

**Pine Bluff, Ark.**—Preparations are being made to build a bridge across the Arkansas river.—W. L. Stebbins, County Engineer.

**Marysville, Cal.**—A combination wagon and railroad bridge at Nicolaus is projected.

**Muskogee, I. T.**—The Muskogee Electric Traction Company has completed plans for a bridge across the Arkansas river; cost, \$130,000.

**New York, N. Y.**—The following are the bids received for work on the Manhattan bridge: Ryan-Parker Construction Company, \$6,493,223; John Pierce Company, \$6,596,638; General Erecting Company, \$6,769,983; Milliken Brothers, \$7,566,192, and American Bridge Company, \$8,312,146.

**Providence, R. I.**—The New York, New Haven and Hartford Railroad will construct a bridge over the Seekonk river to connect the East Providence tracks and the tunnel.—C. M. Ingersol, Chief Engineer.

**Norfolk, Va.**—A bridge will be built by the Tide Water Railway Company, over New river; cost, \$300,000.—E. F. Harrington, Engineer.

**Monitor, Wash.**—A bridge is to be built across the Wenatskee river; cost, \$5,000.

**Colfax, Wis.**—The Wisconsin Central is preparing to build a steel bridge having a 250-foot span.

**Proposed Work.**—**Blue Earth, Minn.**—The County Board has appropriated \$250 to aid in building the Lura steel bridge.

**Waterford, Minn.**—A bridge will be built across Canon creek.

**Sterling, Ill.**—The citizens have voted to issue bonds for a bridge at Avenue G.

**Richmond, Ind.**—The Richmond Street and Interurban Company will construct a bridge over Clear creek.

**Contracts to be Awarded.**—**Decatur, Ind.**—Bids will be received, June 4, for constructing six concrete abutments, two concrete arches and five steel bridges.

**Indianapolis, Ind.**—Bids were opened, May 26, for constructing a bridge over Williams creek and one over Buck creek.

**Logansport, Ind.**—Bids will be received, June 7, for concrete or stone arches and bridges to be erected.—O. G. Gard, County Auditor.

**Shelbyville, Ind.**—Bids will be received, June 4, for constructing two steel bridges over Lewis creek.—Thomas Hawkins, County Auditor.

**Leavenworth, Kan.**—Bids will be received, June 4, for rebuilding bridge 90, Fairmount township.

**Leavenworth, Kan.**—Bids will be received, June 6, for building two stone or reinforced concrete culverts.

**New Orleans, La.**—Bids will be received, July 1, for constructing four steel bridges. J. C. Hardin, Clerk, Police Jury, Leland, La.

**Duluth, Minn.**—Bids will be received, June 7, for constructing a 90-foot span steel bridge over the White Iron river, seven miles from Ely.—O. Halden, County Auditor.

**Independence, Minn.**—Bids will be received, June 7, for constructing three bridges on the Miller trunk road.—O. Halden, Duluth, County Auditor.

**Krangles, Minn.**—Bids were opened, May 29, for constructing a bridge across the Buffalo river.—W. A. Brendenmuhl, Clerk.

**St. Peter, Minn.**—Bids will be received, June 4, for constructing three stone bridges.—Supervisors Belgrade Township, Nicollet County.

**New York, N. Y.**—Bids will be received, June 14, for constructing Manhattan subway station for the Williamsburg bridge, between the boroughs of Manhattan and Brooklyn.—Department of Bridges, 13-21 Park Row, New York.

**Celina, O.**—Bids will be received, June 9, for grading, macadamizing and constructing culverts on Winkeljohn road.—J. M. Winters, Clerk.

**Lebanon, O.**—Bids will be received, June 8, for creosoted wood flooring for suspension bridge over the Great Missouri river.—Sam D. Henckle, Deputy Surveyor.

**Sidney, O.**—Bids will be received, June 19, for the purchase of \$40,000 bridge improvement bonds.—J. C. Rosser, County Auditor.

**Portland, Ore.**—Bids will be received, June 8, for constructing a reinforced concrete or steel bridge over Sullivan's gulch.

**Mauch Chunk, Pa.**—Bids will be received, June 4, for constructing a steel bridge across Hickory Run creek.—D. Oliver Straup, Chairman, Board County Commissioners.

**Iola, Wis.**—Bids will be received, June 1, for constructing a stone arch bridge across south channel and reconstructing bridge across north channel at Wupf's Mill.

## PARKS

**Chicago, Ill.**—Final authority for the issuance of \$1,000,000 bonds for small parks and \$1,000,000 of the \$2,000,000 maintenance bonds was given by the West Park Board.

**Indianapolis, Ind.**—The Board of Park Commissioners will shortly ask for bids for constructing a \$30,000 conservatory building in Riverside Park.

**New Orleans, La.**—The Pille Market will be torn down and the ground converted into a children's playground.

**Revere, Mass.**—A design has been adopted for improving Paul Revere Park.

**Westfield, Mass.**—A new entrance will be constructed and trees and shrubbery will be planted in Pequot Park.—Thomas R. McClunie, Landscape Gardener, Hartford, Conn.

**Providence, R. I.**—The City Council has asked for authority to issue \$200,000 park and playground bonds.

**Seattle, Wash.**—Bids will be re-advertised for \$500,000 park bonds.

**Milwaukee, Wis.**—Appropriations for parks have been made as follows: Mitchell Park, \$14,000; Washington Park, \$14,000; Riverside Park, \$10,000; Kosciuszko Park, \$5,000; Lake Park, \$4,500, and Humboldt Park, \$500.

**Montreal, Que., Can.**—The City Council is considering the plan to convert an old cemetery on the Papineau Road into a public park.

**Innisfail, Alta, Can.**—An appropriation of \$7,000 has been made for a park.

## STREET RAILWAYS

**Cotter, Ark.**—Plans are under way to establish an electric railway to Mountain Home.

**Denver, Colo.**—The Municipal Traction Company has petitioned for franchise to operate a street car line.

**Washington, D. C.**—Plans have been completed for a power house for the Capital Traction Company; cost, about \$180,000.—George T. Dunlop, President; R. D. Sims, Treasurer.

**Roswell, Ga.**—The Atlanta, Roswell and Cumming Electric Railway and Power Company proposes to build a road to Cumming; a bond issue of \$250,000 will be made.

**Belleville, Ill.**—The Southern Traction Company has been granted franchise to operate its lines on several streets.

**Cairo, Ill.**—The power plant of the Cairo Electric and Traction Company will be improved.—Charles Garrison, Boston, Mass., Electrical Engineer.

**Chicago, Ill.**—The Elgin and Bloomingdale Railroad Company has changed its name to the Chicago and Elgin Electric Railway Company, and has increased its capital stock to \$800,000. The road will connect with the Lake street elevated and will carry freight into Chicago over the Great Western or Illinois Central.

**Shelbyville, Ind.**—The Central Railway Company has been incorporated to build a traction line. It is proposed to make a circuit of towns in Hendricks, Morgan, Johnson, Marion, Shelby, Hancock and Boone counties. Capital, \$100,000.—Incorporators, E. E. Flickinger, John V. Wagoner, William House and L. B. Mercer.

**Lawrenceburg, Ky.**—An electric railway to Frankfort is being promoted.

**Louisville, Ky.**—The Louisville Eastern Electric Railway Company will issue \$2,000,000 bonds for the purpose of improving and extending its lines.—F. M. Fauvre, President.

**Baltimore, Md.**—The Lorain Electric Railway Company has been incorporated to build a line. Capital, \$25,000.—Incorporators, Wm. C. Page, Leonidas G. Turner, Dr. George Y. Everhart, William E. Zimmerman and others.

**Yazoo City, Miss.**—An issue of \$50,000 bonds will be made for building an electric street car line, covering five miles of streets.

**Columbus, O.**—The Schoepf syndicate expects to have the largest electric system in the country. By consolidating the Indiana, Columbus and Eastern Traction Company will have cars operating between Zanesville, Columbus and Indianapolis; Zanesville, Columbus and Cincinnati, and from Cincinnati to Indianapolis. Many improvements will be made.

**Bloomsburg, Pa.**—The Berwick and Nescopeck and Berwick and Suburban Trolley lines have increased their capital to \$1,500,000.

## GARBAGE AND WASTE DISPOSAL

**Centerburg, O.**—A garbage disposal plant is being considered.

**Norfolk, Va.**—The Market Committee has decided to purchase garbage cans for use in the market house.

**Racine, Wis.**—Bids will be received, June 2, for a site for the garbage incineration plant.—P. H. Connolly, C. L. Crabb, James Miller, Board of Public Works.

**Winnipeg, Man., Can.**—Bids will be received, June 21, for erecting a garbage incinerator, 140 tons per day capacity.—Dr. A. J. Douglas, Health Officer.



## MISCELLANEOUS

**Lafayette, Ind.**—An election will be held to decide the question of issuing \$100,000 city bonds.

**Charles City, Iowa.**—A government weather observatory will be erected.—James Knox Taylor, Washington, D. C.

**Annapolis, Md.**—Arrangements are being made to issue \$25,000 public improvement bonds.

**Montevideo, Minn.**—The Chippewa County Commissioners are arranging to issue improvement bonds.—F. J. Pubertno, Chairman, Board of County Commissioners.

**Paterson, N. J.**—An appropriation of \$383,728.47 will be asked for county expenses for remaining seven months of the year.—Finance Committee of Freeholders.

**Mt. Penn, Pa.**—An election will be held to decide the question of issuing \$10,000 improvement bonds.

**Salt Lake City, Utah.**—A number of voting machines will be purchased.—J. U. Eldredge, Jr., County Clerk.

**Proposed Work.—Brooklyn, N. Y.**—The lowest bid for extending the South Harbor entrance was that of the Canal Quarry Company, W. E. Baldwin, President.

**Fort Totten, N. Y.**—Bids will be received, June 4, for dredging at Fort Totten.—Captain George H. McManus, Constructing Quartermaster.

**New York, N. Y.**—Bids will be received, June 5, for driving piling and putting timber and iron in place for constructing dikes in Hudson River.—Col. W. R. Livermore, Engineer Corps, Army Building.

**Syracuse, N. Y.**—A resolution was passed to improve the Groton Road.

**Berea, O.**—An issue of \$7,000 steam heating bonds will be made.

**Portland, Ore.**—Bids will be received, for fuel and provisions for lighthouse tender "Columbia" during the year ending June 30, 1907.—Major S. W. Roessler, Quartermaster.

**Amarillo, Tex.**—Bids will be received for \$20,000 5 per cent. 5-40-year county bonds.—Sam R. Merrill, County Judge.

**Ogden City, Utah.**—Thirteen voting machines will be purchased, the expense to be borne equally by the city and county.

**Contracts to Be Awarded.—Washington, D. C.**—Bids will be received, June 21, for constructing 19 miles of canal and 27 miles of laterals in Klamath county, Oregon, including checks, culverts, bridges, etc., and 570,000 cubic yards excavation, 1,550 cubic yards masonry.—A. E. Hitchcock, Secretary, Interior Department.

**Washington, D. C.**—Bids will be received, June 28, for erecting a power house, installing a boiler plant generating machinery, steam laundry equipment, refrigerating plant and power house piping.—John Stephen Sewell, Captain, Corps Engineers, U. S. Soldiers' Home.

**Fort McPherson, Ga.**—Bids will be received, June 9, for remodeling the mess hall, including plumbing, steam heating and electric wiring.—Capt. B. B. Buck, Constructing Quartermaster.

**Chicago, Ill.**—Bids will be received, July 11, for an emergency butterfly dam, to be a pivoted steel structure with foundations and end wall of Portland cement concrete.—I. H. Bryan, Clerk, Board of Trustees, Sanitary District.

**Lawrence, Kan.**—Bids will be received, June 4, for furnishing five electric motors, about 23 horsepower, with transformers, cut-outs, fuses, switches, lightning arresters, etc.—Haskell Institute.

**Carthage, N. Y.**—Bids will be received, June 1, for the purchase of \$12,000 4 per cent. Diana township bonds.

**Gallipolis, O.**—Bids will be received, June 5, for \$55,000, 3.65 per cent. 30 year Gallia County bonds.—F. F. Thrombly, County Auditor; C. W. Kerr, Treasurer.

**Portland, Ore.**—Bids will be received, June 29, for constructing 75 miles of canal, extending from Unatilla River near Echo, Ore., to the Cold Springs reservoir.—E. A. Hitchcock, Secretary, Department of the Interior.

## IN THE MARKET

**At Home.**—Baltimore Engine Co., 327 North Culvert St., Baltimore, Md., wants a ten-ton steam roller.

D. M. Baker, Room 14 Wedeman Building, Jacksonville, Fla., wants a trench machine.

Childersburg Brick Co., Talladega, Ala., wants a second-hand steam shovel.

Clarkson, Brooks & Co., 100 Broadway, New York, want a manufacturing site of 500 acres in a city with navigation facilities.

Dr. A. G. Coumbe, president Woodstock Lime Co., Vienna, Va., wants a rock crusher, a steam drill and a hoisting engine.

A. V. Cross, Guilford College, N. C., wants a hoisting engine.

Porter Depray, Emporia, Kas., wants two steam rollers.

J. S. Gilliland, Goodwater, Ala., wants a water-wheel.

Jacksonville Cracker Works, 22 Hogan street, Jacksonville, Fla., wants electric equipment and building materials.

W. E. Jones, manager, Washington Investment Co., Washington, N. C., wants machinery for a Sand Lime Brick Plant.

The Juniata Furnace and Foundry Co., Newport, Pa., want immediately a 3/4-yard bucket steam shovel.

W. C. Porter, Laurel, Miss., wants one 7 1/2 x 10-inch hoisting engine.

Ricks Bros., Reynolds, Georgia, want six arc lamps.

Shull Contracting Co., Beaufort, N. C., wants a 6-inch centrifugal sand pump.

Venable Bros., Temple Court, Atlanta, Ga., want conveying machinery for their crusher plant.

C. D. Vickers, Lockport, N. Y., wants two second-hand steam rollers.

R. A. Zoeller, Tarboro, N. C., wants 600 feet 6-inch cast-iron water pipe, including hydrants and valves.

**Abroad.**—Budapest, Hungary, Joseph Schvarcz & Co., Vacze-korut 26, wants addresses of manufacturers of compressed air bungs.

Christiania, Norway.—J. S. Cook wants small dynamos.

Rio Grande du Sul, Brazil.—On October 15, proposals will be received for the construction of a water works system of 1,300,000 gallons per day capacity. Address 148 Bureau of Manufactures, Washington, D. C.

The City of Wellington, New Zealand, wants to buy trucks and equipment for six top-deck combination tram cars, bodies to be constructed at Wellington. Apply to No. 126, The Bureau of Manufactures, Washington, D. C.

The Government of Cuba wants supplies for roads and bridges. American machinery is favored; \$4,000,000 will be spent. Apply to the C. Hemple Engineering Co., Havana, Cuba.

Bangkok, Siam.—Tenders for a railway bridge over the Menaw river for the Royal Siamese Railway are wanted. Address Bureau of Manufactures, Washington, D. C.

## Little Lessons on Big Things—

No. 3.—(Read also Nos. 1 and 2). This is "another story," but it points the same moral and adorns the same tale. A town in the East, not so large a one as that in the West alluded to last week, had put down a paving that turned out, in an unprecedentedly short space of time, unsatisfactory. Who was to blame for this no one exactly knew. Whether it arose from the "instructions" not being closely followed or whether from incompetent work in the laying of it, as this was done by the local authorities themselves, it was difficult to judge. It was, however, as it stood, an undoubted miserable failure. Full of holes and worn patches, it seemed about as bad as a piece of paving could possibly be. Of course the local authorities blamed the makers, and equally, of course, the makers blamed the local authorities. Take it all round there was the very deuce to pay. The account was held up, legal proceedings on both sides were threatened and the local authorities lost caste in the town as being a body of unbusinesslike incompetents. It was felt by the residents that something like \$40,000 had been absolutely thrown away and that the whole thing would have to be done over again at as great, if not a greater, cost. Someone had blundered, but who? There was no suspicion or trace of "graft," and both the makers of the paving and the local authorities had acted in good faith. The question then arose after the bitterness ceased—what should be done? A compromise was eventually effected, the makers agreeing to pay half of the fee of an expert to examine and report on the work and to stand half of the cost of the repairs providing the makers could do these themselves. An "expert" whose card appears regularly in our columns was selected, who reported that the laying of the paving was at fault and acquitted the makers. The makers "made good" their promise at a cost of \$5,500 and have finished the job as good as new and are going to advertise the facts as early as possible. This will strengthen their reputation for good work and fair dealing, and should remind all Experts and PAVING makers that the best way to secure business is to **advertise** in the special PAVING NUMBER of the MUNICIPAL JOURNAL AND ENGINEER to be issued on Wednesday, June 6.

For Machines to Drill, Blast and Test Holes and Water Wells, write "LOOMIS CO., TIFFIN, O."

High Grades  
of

**PURE ASPHALT**

The "Maltha"  
Brand

California Asphaltum Sales Agency

San Francisco Chicago New York London  
JOHN BAKER, Jr., Manager

## PUBLIC UTILITIES OF TRENTON, N. J.

### Work of Department of Garbage and Ashes—Cost and Description of Plant—The Waste Consumed—How Collected

THE Department of Garbage and Ashes of the City of Trenton, N. J., Walter Firth, Superintendent, is of great interest in demonstrating the successful operation of an incinerating plant. The plant was erected five years ago by the Davis Garbage Furnace Company of Lancaster, Pa., at a cost, exclusive of the ground, of \$27,000, and has been in constant and satisfactory use ever since. It consists of two pits or furnaces of a capacity of 25 tons each, which are, however, often run far in excess of that. The teams drive in at the dumping floor and dump directly into a large drying pit above the furnace, from which is fed gradually the fire below. The cost averages about 17 cents in coal to each ton of garbage destroyed.

A city ordinance, which is generally observed, defines that garbage is considered only such material as will burn; ashes and tin, glass, etc., are not mixed with it. In consequence, everything is consumed to an ash, of which 85 per cent. is coal ash, the total residue per ton of garbage not exceeding 800 pounds. This is largely used in filling up waste ground, repairing streets, etc.

The total cost of the plant, aside from the crematory, was about \$25,000, including a stable, 11 teams, wagons and other equipment.

The annual appropriation for running the department is \$24,000, of which a small balance was left last year. The average amount of material collected is about 750 tons monthly of garbage and 2,500 tons of ashes. The lowest amount was in March of this year, being 566 tons of garbage and 3,700 tons of ashes; and the highest last September, 1,379 tons of garbage and 1,985 tons of ashes. To this must be added about 125 tons per month of waste hauled to the crematory by private parties to be disposed of. The plant is run about eight months in the year, with two men, at \$50 per month. From May to September a helper is added.

### Streets of New Jersey Capital

THE City of Trenton, N. J., offers an interesting object lesson in the efficiency of a well-disciplined Street Cleaning Department, which costs about one-half what is usually considered necessary in a city of its size.

The total annual appropriation for the entire work of the department is \$46,000. With this amount forty miles of paved streets are swept daily by hand, at a cost of \$3 per mile; many of them are swept twice, at a cost of \$5 per mile; about fifty miles of dirt streets

are kept clean of rubbish; all new crossings are constructed and old crossings repaired; macadam and paved streets are kept in repair; equipment is maintained and salaries paid.

The actual street cleaning cost per year is \$25,000. This includes a force of about 65 men with hand brooms—no machines are used—and the streets are a marvel of cleanliness. The Street Commissioner, John Ginder, ably seconded by his assistant, Mr. Newton, and one clerk, comprise all the staff.

These figures are the more surprising when one considers the rapid growth of Trenton, which now numbers about 85,000 inhabitants. The city is constantly adding to its paved streets without a corresponding increase in appropriation. Yet it is claimed there is not a single street in Trenton that is not cleaner the entire twenty-four hours than any corresponding street in New York.

## WATER PLANT A SUCCESS

### Owned and Operated by the Municipality—No Meter System—Receipts and Expenditures—Equipment

THE Waterworks of Trenton, N. J., have been owned and operated by the municipality for upward of fifty years and have furnished an ample supply of good water at probably the lowest rates in America.

A general meter system has not been adopted, the contention of the Commissioners being that they aim to supply an abundance of water at the lowest possible cost. Thus the consumption is quite large, being about 120 gallons per capita per day, exclusive of some large manufacturing plants which use meters and consume large quantities, one using as much as 1,500,000 gallons daily. The total consumption per day is 12,000,000 gallons, all of which is pumped from the river to a settling basin located two miles away, at an elevation of 150 feet under a pressure of 70 pounds. The capacity of this basin is 100,000,000 gallons. While no filter is used, the water is of good quality.

The total annual expense for maintenance is \$56,137 for the current year; total receipts, \$150,000. The plant to-day represents an expenditure of \$2,040,322.45. There is in the sinking fund \$235,455.96. The equipment consists of one Allis-Chalmers Company, one Worthington and one Barr pump.

The rapid growth of the city has made it necessary to expend \$250,000 in the last two years in main feed lines, and last year 700 new connections were made, as against 296, the maximum for any preceding year. Additional extensions of the existing system are projected to supply water to suburban localities. Preliminary plans for the work are being discussed. It is believed that an abundance of water may be had from the present source of supply, but a considerable expenditure will be required to meet the increasing demands of outlying sections. New pipe lines must be installed in various districts, and repairs and alterations to some of the existing services may be necessary.



## WAGONS FOR CONTRACTORS

The "Ideal" a Modern Production—Required for City and Railroad Work—Of Simple Design—Studebaker Brothers Successful

THE "Ideal" is the latest improved production of the Studebaker Brothers Manufacturing Company, designed and built expressly for municipal, city and railroad contractors' use, for hauling sand, gravel, crushed stone, cobble stone, wet or dry earth, asphalt, macadam, street sweepings, rubbish and garbage. The box is square, smooth and clear of any obstructions on the inside; the chains controlling the trap doors are all on the outside. For city work requiring dump wagons of 3, 4, 5 or 6 yards capacity, for light, bulky materials, such as street sweepings and rubbish, the "Ideal" is equipped with specially wide wings, hinged for convenience in loading, and to



STUDEBAKER BROTHERS—DUMP WAGON, SHOWING TRAP-DOOR ATTACHMENTS

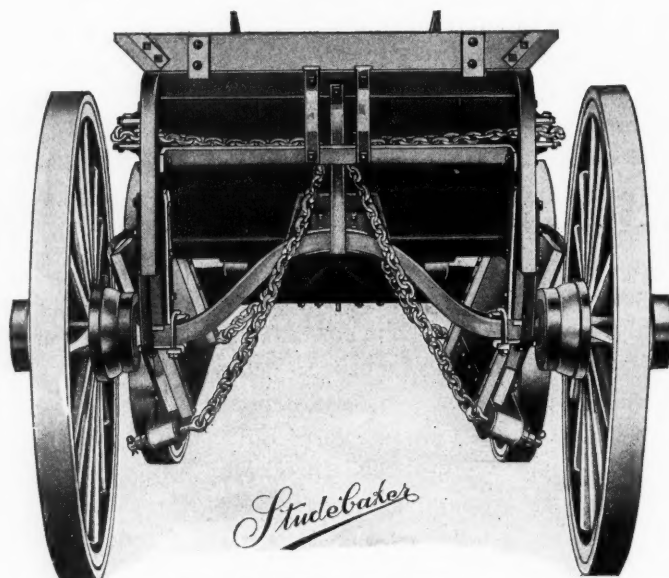
suit amount and weight of load to be carried where it does not exceed the capacity of the axles.

Owing to the simplicity and strength of the dumping attachments, the trap doors can be dropped and placed in position to receive the load much quicker than with endless chains and sprocket combinations; the lifting chains attached to trap doors can be adjusted to secure a tight bottom at all times.

One of the accompanying cuts shows the simplicity of the dumping attachments, operated entirely by two levers, the long lever for closing the trap doors, the short one for releasing them and dumping the contents of wagon. Note the wormlike cogs on ends of arbor, to which the lifting chains are attached and wound, preventing the chains from slipping and wearing, which facilitates operation of the wagon with the least possible delay. The attachment is claimed to be positive in its work, and avoids delay and inconvenience in operating. The beds are ironed with wrought and steel drop-forgings, giving greatest strength and wearing qualities.

### THE ARCHED AXLE

The arched axle is a special feature used on no other dump wagon. By use of this axle, the couple is shortened. Another and more important feature is that the arched axle frees the dump and prevents the wagon being stalled. Both the 1½ and 2-yard wagons have removable solid top boxes. The 1½-yard wagon holds 28 cubic feet in the box, 9 cubic feet in top box, total of 37 cubic feet, stroke measure. The 2-yard wagon holds 28 cubic feet in box



IDEAL DUMP WAGON—REAR VIEW

and 20 cubic feet in top box, total 48 cubic feet, stroke measure.

The "Ideal" is the shortest coupled bottom dump wagon on the market, and the easiest draft. The top of the bed is closer to the ground than the top of an ordinary wagon bed. The front wheels can be turned completely under the body, permitting the entire wagon to be turned in its own length. The rear axle is arched, freeing the dump when the trap doors are released or opened, and the doors automatically lift and fold against the sides of the box, preventing the wagon from being stalled on the dump.



THE IDEAL DUMP WAGON



## Utilities, Trade Notes and News

**CHLORIDE ACCUMULATORS.**—Bulletin 96 of the Electric Storage Battery Co., Allegheny avenue and Nineteenth street, Philadelphia, describes their chloride accumulator in use in residential lighting and power plants. By using a battery in conjunction with any form of electric generation, a 24-hour service without necessity of operating a generating plant more than a few hours is secured. It is useful as a reserve in case of accident to the source of supply, allows an unusual capacity to be used for a short time, and gives a steady light under all circumstances. An alternative current from a power company may be used for charging the battery by the use of an alternating current rectifier.

**ELECTRICAL ENGINEERING.**—The Electrical Properties Company, 111 Broadway, New York City, has been organized to acquire, finance and develop properties, especially those in which electricity plays the principal part, such as power, lighting, and traction enterprises. It will deal in and guarantee the securities of corporations operating such properties. Through Westinghouse, Church, Kerr and Company (whose capital stock the new company owns) it will conduct a general engineering and construction business. One of the objects of the new company will be to co-operate with vested interests, such as railways and other public service companies, in the development of properties for their account, and either temporarily or permanently financing such properties. Mr. John F. Wallace has been selected as president of the new corporation.

**ELECTRICAL TESTS.**—The Electrical Testing Laboratories, Eightieth street and East End avenue, New York City, is a commercial enterprise owned by a stock company whose object is to make tests of material or devices used in electrical work. The main building is 50x120, three stories high, solidly built and admirably suited to laboratory purposes. Current for general purposes is purchased from the New York Edison Company, near by. The electrical laboratory is equipped for commercial purposes which demand that such work shall be carried out with promptness, at low cost, and with a degree of accuracy sufficient to meet the needs of each special case.



**Four-way adjustable street signs with reinforced steel tube posts and sheet metal perforated signs**

These signs are indestructible by the elements, do not rust or corrode and can be read from a long distance and at any angle you approach them. Adjustable to the intersections, will carry as many signs as are needed for additional intersections. Write for catalogue. We contract with municipalities for signs and house numbering.

**Perforated house numbers in any finish a specialty**  
**THE AMERICAN STREET SIGN CO.**  
 CLYDE, OHIO

**ENGINEERING SPECIALTIES.**—The Luckenheimer Company, Cincinnati, O., opened a branch store at 66-68 Fulton street, New York City, May 1.

**TEST OF FIREPROOFING.**—The Berger Mfg. Company, Canton, Ohio, are proud of their fire record in San Francisco. The Haywood Building, an eleven-story steel structure, withstood the shock and fire and can be put in repair for a few thousand dollars. The Prong Lock Wireless System protected the framework from serious damage by heat.

**TRANSFORMERS.**—Bulletin 65 of the Crocker Wheeler Company, Ampere, N. J., describes their new core type transformers for high-tension power transmission. They are manufactured in all sizes up to 4,000 K. V. A. for any commercial frequency, and for all voltages up to 200,000. Nearly all American-built transformers up to this time have been of the shell type, while European engineers have favored the core type.

**THE TRUSSED CONCRETE BULLETIN.**—Published by the Trussed Concrete Steel Company, Detroit, Mich. The first issue gives an account of a fire in a Minneapolis warehouse which, although it burned two hours, did practically no damage to the building. The warehouse was nine stories high and had a floor space of 450,000 square feet. The bulletin is issued at Detroit by the manufacturers of the Kahn system of reinforced concrete.

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ANY LENGTH OR QUANTITY  
For Town or City Electric Light Plants

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## INCORPORATIONS

*When our readers desire to correspond with any of the following companies, they should address the company itself or a director, incorporator or other official or partner by name to the address (if given) under such name. This will prevent letters being returned and marked "unknown."*

### ALABAMA

**Atlantic and Gulph Portland Cement Company,** Birmingham; capital, \$10,000. Incorporators: Wm. E. Stokes, president; James D. Evans, secretary and others.

**Florence Brick Company,** Florence; to take over and operate the plant of the Hauervas Brick Company. Incorporators: F. D. Green, president; S. P. Merrill, secretary-treasurer; N. S. Hauervas, general manager.

**Mobile Pure Milk Company,** Mobile; to pasteurize and clarify milk; capital, \$30,000. Incorporators: Thomas A. Doody, J. W. Doody, P. W. Pilkington and others.

**The Muscle Shoals Power and Development Company,** Sheffield; to generate electric power for Sheffield and vicinity; capital, \$10,000. Incorporators: J. S. Kernachan, Florence, president; C. B. Ashe, vice-president, and Joseph R. Coleman, secretary, both of Sheffield.

**Zamora Construction Company,** Birmingham; capital, \$5,000. Incorporators: W. W. Ransom, Mt. Stratford, W. S. Scott and others.

### ARKANSAS

**City Power, Light and Water Company,** Augusta; capital, \$50,000. Incorporators: J. A. Vinson, A. H. Tillman Campbell and Lewis A. Vinson.

### CALIFORNIA

**The Redondo, Hermosa and Belvidere Railway Company,** Los Angeles; capital, \$100,000. Incorporators: J. G. Palmer, E. A. Smith, R. L. Antisdell, M. Giles and C. F. Carlson.

### COLORADO

**The Institute Electric Company,** Telluride; to manufacture and sell power and electric light; capital, \$1,000,000. Incorporators: Wm. Story, president; Albert L. Woodhouse, general manager; E. C. Sackner, secretary.

### ILLINOIS

**The Elgin Merchants Light Company,** Elgin; capital, \$2,500. Incorporators: John H. Stickling, John Rienert and Frank H. Stickling.

**Grafton Heat, Light & Power Co.,** Grafton; capital, \$8,500. Incorporators: L. T. Westrick and others.

**The Springfield, Clear Lake & Rochester Interurban Railway Company,** Springfield; to build a road from that city to Rochester with a branch to Clear Lake. Incorporators: Ira F. Twist, William G. Brown, C. E. Miller, I. M. Bell, L. E. Howell, all of Rochester.

### INDIANA

**The Central Railway Company,** Indianapolis; terminus, Brownsburg; capital, \$100,000. Incorporators: Charles H. Burras, of Chicago; E. E. Flickinger, John V. Wagoner, William House, L. B. Muer, of Indianapolis.

### INDIAN TERRITORY

**The Ardmore and Northwestern Electric Railway,** Ardmore; capital, \$1,000,000. Incorporators: J. T. Denton, A. E. Williford, Robert E. Lee.

### KANSAS

**Southern Kansas Railway, Light & Power Company,** Chanute; capital, \$4,000,000. Incorporators: R. C. Rawlins, L. Rosenthal, John J. Jones, Frank C. Dixon and J. W. T. Stephens, all but the last of Chanute.

**Topeka Independent Telephone Company,** Topeka; capital, \$1,000,000. Incorporators: D. L. Pankey and others.

### LOUISIANA

**Citizens Ferry Company,** New Orleans; to bid for the Canal St. New Orleans ferry franchise; capital, \$200,000. Incorporators: J. P. Vezien, A. E. Hotard, F. C. Durie, George Herbert, Jr.

### MAINE

**New Jersey Stenolyth Company;** making and sale of stenolyth; capital, \$500,000. President and treasurer, I. L. Fairbanks, Portland, Me.; clerk, J. Williamson, Portland, Me.

### MARYLAND

**The Lorain Electric Railway Company;** capital, \$25,000. Incorporators: William C. Page, Leonidas G. Turner, Dr. George Y. Everhard, William E. Zimmerman and others.

### MASSACHUSETTS

**Austin Engineering and Construction Company;** contractors, constructors; capital, \$50,000. Incorporators: F. H. Merrill, H. M. Cox, Melrose.

**Boston Building Wrecking Company;** contractors, etc., tearing down, etc.; capital, \$4,000. Incorporators: Charles West, W. R. West, 400 Border street, East Boston.

**Boston Independent Telephone Securities Company;** telephone and telegraph apparatus; capital, \$250,000. Incorporators: W. F. Larkin, Quincy; W. F. Poole, Brookline.

**Ford Steel Column Company;** iron, steel, metals, etc.; capital, \$25,000. Incorporators: Fred A. Ewell, 1433 Washington street, Boston; A. W. Ford, Wollaston; G. W. Faulkner, Cambridge.

**Greenfield Artificial Stone Company;** contractors of artificial stones; capital, \$20,000. Incorporators: Frank O. Wells, Irving L. Bartlett, Greenfield.

**Keighley Metal Ceiling & Roofing Company;** sheet metal, etc.; capital, \$85,000. Incorporators: J. P. Arches, W. C. Torrey, W. D. Adams, Boston.

**Owen Manufacturing Company;** heat apparatus appliances; capital, \$15,000. Incorporators: G. W. Fairfield, 33 Broad street; treasurer, Newall F. Stuart, 33 Broad street; clerk, Charles H. Coolidge, 30 Converse avenue, Malden.

### MINNESOTA

**Missabe Electric Company,** Duluth; capital, \$50,000. Incorporators: L. B. Spelman, president; E. M. Morgan, secretary.

### MISSISSIPPI

**Gulfport Creosote Works,** Gulfport; capital, \$100,000. Incorporators: J. T. Jones, H. R. Stamford, A. M. Lochett and others.

### MISSOURI

**Electric Wiring Company,** St. Louis; capital, \$7,500. Incorporators: R. M. Hodges, John P. Phillips and C. F. Adams.

### NEW JERSEY

**Federal Engineering Company,** 147 East State street, Trenton, N. J.; mechanical engineers, brass founders, metal workers, etc.; capital, \$60,000. Incorporators: Van Reed, Jr., L. C. Frohriebe, J. Richard Kommer, J. Ed. Colter, all as above.

**General Supply Company,** of Glen Rock, Ridgewood, N. J.; wholesale and retail coal dealers, building material and carting; capital, \$75,000. Incorporators: Nelson S. Cumberley, Philip I. Hover, George A. Hofmeyer, all as above.

**Lake County Manufacturing Company,** 419 Market street, Camden, N. J.; to refine cotton oil and other oils; timber merchants; electricians, mechanical engineers; capital, \$150,000. Incorporators: R. M. Hall, C. A. Hall, E. Rice, S. Granger Latta, W. H. Rupe and J. C. Doyle, all as above.

**National Flexible Shaft Company,** 19 Center street, Newark, N. J.; to manufacture flexible shafts, etc.; capital, \$60,000. Incorporators: Louis C. Hartshorn, 10 Court street; Edward Racine, 17 West Kinney street; Harmon Conklin, 210 Thirteenth street, all of Newark, N. J.

**Percy Hellner & Son, Inc.,** 127 Market street, Camden, N. J.; to mine and quarry coal, ore, rock, sand, clay, oil, etc.; capital, \$1,000,000. Incorporators: James D. Evans and William E. Stokes, 119 South Fourth street, Philadelphia, Pa.; Wilfred B. Wolcott, as above.

**The E. L. Reinhold Realty Company,** 419 Market street, Camden, N. J.; real estate, contractors, deal in building materials, etc.; capital, \$150,000. Incorporators: Edwin L. Reinhold, Marietta, Pa.; Henry L. Linebaugh, New Cumberland, Pa.; Jasper N. Deeter, Harrisburg, Pa.

### NEW YORK

**John Auer & Sons;** general building contractors; capital, \$10,000. Incorporators: John Auer, 809 Willoughby avenue; John W. Auer, 395 Vernon avenue; Charles L. Auer, 552 Decatur street, all of Brooklyn.

**Brownwood Gas and Electric Company;** capital, \$80,000. Incorporators: S. P. Coggin, B. S. Boysen and R. B. Rogers.

**W. S. Barstow & Company;** electrical and mechanical engineering; capital, \$125,000. Incorporators: William S. Barstow, 301 West 108th street; O. Clement Swenson, 607 Third avenue, both of New York; Joseph B. Taylor, 945 President street, Brooklyn.

**Beasley-Fitzpatrick Company;** to deal in bluestone and building materials; capital, \$6,000. Incorporators: Charles J. and Ethel Fitzpatrick, 149 East 60th street, New York; Lillian B. and Alfred Beasley, 329 Bainbridge street, Brooklyn.

**Bryson-Gamble Company;** general engineers and contractors; capital, \$2,000. Incorporators: Fred W. Abbot, Thomas B. Bryson, New York; Hamilton R. Gamble, New York; P. A. Robbins, Englewood, N. J.

**Canarsie and Jamaica Bay Ferry Company;** to establish and run a ferry; capital, \$10,000. Incorporators: J. Frank Birdsall, Laurence H. Dooley and Arthur L. Hurley.

**Ellicottville Electric Light Company;** light, heat and power; capital, \$5,000. Incorporators: James G. McMahon, Michael Murphy and Eugene Hickey, all of Ellicottville, N. Y.

**Electric Properties Company,** 111 Broadway, New York City. To deal in electric properties; capital, \$12,000,000. Incorporators: Charles H. Allen, Paul D. Cravath, H. D. Giddings, N. M. Halsley, all of New York; George C. Smith of Pittsburg; John A. Spoor, Chicago; Moses Taylor, New York; E. G. Tiltonson, Cleveland; F. D. Underwood, New York; R. B. Van Cortland, New York; John F. Wallace, New York; George Westinghouse, Pittsburg.

**Enterprise Light Company;** to manufacture mantles, gas burners, fixtures, etc.; capital, \$50,000. Incorporators: Charles Fackenheim, 117 Taylor street; Leon Fister, 189 Rodney street, both of Brooklyn; Jacob Bieber, 382 East Eighth street, New York.

**The Ford Beach and Power Company,** Binghamton (coal); capital, \$150,000. Incorporators: F. M. Beach, E. Powell and W. W. Morey, Binghamton.

**Traxton Filler Company;** to manufacture filters and plumbers' supplies; capital, \$25,000. Incorporators: William A. Traxton, 226 East 118th street; George Slaney and Francis Olna, 8 Perry street, all of New York.

**Hinsdale Park;** real estate, building, etc.; capital, \$400,000. Incorporators: Llewellyn L. Powell, 60 Wall street; Francis Dedek and J. Edward Schwerin, 30 Broad street, all of New York.

### OHIO

**The Chicago, New Washington and Bucyrus Railway Company;** to construct an electric railway; capital, \$500,000. Incorporators: A. W. Thomas, E. L. Williams, W. H. Foxall, K. Ilhaller and H. E. McCabe.

**The Cleveland Heat and Power Company,** Cleveland; capital, \$10,000. Incorporators: A. H. Miller, J. H. Miller, U. S. Mackey, C. W. Saxon and W. R. Purdy.

**The Ohio Standard Sewer Pipe Company,** of East Liverpool; capital, \$150,000. Incorporators: A. L. Johnston, R. E. Thompson, A. T. Kelly, E. E. Henderson and G. H. Garner.

**The Radel Sash Balance and Lock Company,** Cincinnati; capital, \$200,000. Incorporators: John J. Radel, Ed. Schmoltz, John F. Ruehlmann, A. A. Degenhart and E. E. Schmidt.

### SOUTH CAROLINA

**Darlington Brick Company,** Darlington; capital, \$20,000. Incorporators: Bright Williamson and J. E. Blackwell.

### TENNESSEE

**The Chattanooga Railways Company,** Chattanooga. To improve and rebuild railroad lines on Lookout Mountain; capital, \$100,000. Incorporators: Foster V. Brown, Frank Spurlock, R. W. King, D. J. Duncan and Thomas G. Newman.

### TEXAS

**Coleman Water Supply Company;** capital, \$15,000. Incorporators: H. M. Beakley, J. A. B. Miller, R. H. Alexander and others.

**Haskell Light, Ice and Water Company,** Haskell; capital, \$20,000. Incorporators: F. C. Alexander, Joe Irby, T. A. Ballard, J. T. Strickland, H. G. McConnell and others.

**Palestine Light, Heat and Power Company;** capital, \$400,000. Incorporators: John F. Fitzgerald, Charles W. Lucas, E. Chandler Beach, P. W. Brown and others.

**The Wetherford Telephone Company;** capital, \$50,000. Incorporators: J. A. Murray, J. Castler, G. A. Holland, R. S. Lowe, W. D. Carter, C. C. Littleton, J. T. Cotton, E. P. Sawtell, R. A. Armstrong, all of Wetherford.

### VIRGINIA

**The Norfolk and Portsmouth Traction Company,** Norfolk; capital, \$14,000,000. Incorporators: R. Lancaster Williams and others.

**The Public Service Corporation,** Hampton; to produce and distribute light, heat and power. Incorporators: J. W. Rowe, H. F. Elain, S. C. Rees.



## Proposals

### New Steam Roller

Department of Public Works.

Rochester, N. Y., May 16, 1906.

Sealed bids will be received at this office until June 18, 1906, for a ten-top steam roller, built by Aveling & Porter, Rochester, England. May be inspected by inquiring at this office. The Commissioner reserves the right to reject any or all bids.

FREDERICK T. ELWOOD,  
Commissioner of Public Works.

### Notice to Contractors

Notice is hereby given that plans and specifications of the proposed sewerage system, to cost about \$80,000.00, for the City of Bisbee, Arizona, are now open to inspection at the office of the City Clerk of said City. Copy of specifications will be mailed on request.

C. W. HICKS, City Clerk.

### Drainage Canal

Office of the City Clerk,

Wichita, Kansas, May 11, 1906.

Sealed bids will be received at this office for the construction of the Wichita Drainage Canal until 5 o'clock p. m., June 18, 1906. The approximate amount of the work covered by this contract is as follows:

Length, 3 84-100 miles.  
Cubic Yards excavation, 286,032.  
Average width on bottom, 23 1-2 feet.  
Average cut, 9 3-4 feet.  
Sides of cut to slope 1 1-2 to 1.  
Dirt to be deposited on surface, leaving a 10-foot berm.

Clearing and grubbing to be included in price per cubic yard.

All work to be done according to plans and specifications on file in the office of the City Engineer and under his direction.

Bidders will be required to enclose a certified check, in the sum of \$5,000, payable to the city of Wichita, as a guarantee of good faith.

The Mayor and Council reserve the right to reject any and all bids.

R. N. DORR, City Clerk.

### Garbage Disposal

Sealed proposals will be received by City Council (Crematory Committee) until June 20, at 7.30 p. m., for the collection and removal of garbage and for the disposal of garbage.

Bidders may submit proposals for the collection and removal of garbage for a single district or for the entire city or for the disposal of garbage or for the collection and disposal together. Copies of the specifications, proposal blanks and envelopes may be had at the office of the Clerk of Council. All proposals must be placed in the sealed envelopes provided for the purpose and must be deposited in the box in the Council chamber before 7.30 p. m. on date above specified (June 28).

The right to reject any or all bids is reserved. By order of The Council

JOHN J. MONAGHAN, Clerk of Council.  
Wilmington, Del.

### Asphalt for Repairs

Office of City Engineer,

Room 19, City Hall, New Orleans, La.

Sealed proposals will be received at this office until noon, Tuesday, June 12, 1906, and then publicly opened, for supplying the City of New Orleans, from time to time, during the ensuing year, with approximately 1,500 tons of refined asphalt for use in repairing street pavements. Payments to be made in cash. Guaranty deposit \$500.00.

The right is reserved to reject any or all bids. Specifications, bidding forms, and full information will be furnished on application. No bid will be considered unless submitted on "form" furnished by me.

W. J. HARDEE,  
City Engineer.

## Street Improvement

Sealed proposals will be received by the clerk of the Village of Orrville, Ohio, at his office for the Improvement of Pine and McGill streets, commencing at South Main street, thence west to McGill street and thence on McGill street to the south side of Chestnut street, according to the plans and specifications thereon on file in the office of said clerk.

All bids must be filed by 12 o'clock, noon, on the 16th day of June, 1906.

The Council reserves the right of rejecting any and all bids within a period of thirty days after the same are opened.

Bidders must indorse their names and addresses upon the outside of the envelopes containing their bids. Each bid to be accompanied by a deposit of Five Hundred Dollars in cash or a certified check on some bank as a guaranty that if the bid is accepted a contract will be entered into and the performance of it properly secured by two disinterested sureties, one of whom is a resident, otherwise the amount forfeited to the Village; and in case a contract is entered into, said deposit is to remain until the first estimate of work done is reported to the Council.

The bids must be written with ink and the price of each item shall be written out in full as well as in figures.

Bidders to use the printed forms furnished by the village clerk as none others will be accepted. Bids not in accordance herewith will be rejected. Bids for labor and material must be made separately and the Council may accept either, unless otherwise stated in the bid.

Each bid is required by law to contain the full name of every person interested in the same.

S. W. JACKSON,  
Clerk.

Orrville, Ohio, May 17, 1906.

## Vitrified Pipe Sewers, Etc.

Batavia, Ill.

Bids will be received until 2 o'clock P. M., Friday, June 1, 1906, for the Material and Construction at Batavia, Ill., of a complete system of Vitrified Pipe Sewers, consisting of about seven miles of Pipe with Manholes, Catch Basins and Flush Tanks.

Copies of the Ordinance and specifications can be had on application and plans can be seen at the office of the Board of Local Improvements.

CORNELIUS COLLINS, President.  
Board of Local Improvements.

## Canals

Department of the Interior,

Washington, D. C., May 12, 1906.

Sealed proposals will be received at the office of the United States Reclamation Service, Klamath Falls, Oregon, until 2 o'clock P. M., June 21, 1906, for the construction of 19 miles of canals, and 27 miles of laterals in Klamath County, Oregon, with checks, turn-outs, culverts, bridges and other appurtenances, involving about 570,000 cubic yards of excavation, 1,550 cubic yards of concrete masonry, and about 35,000 feet B. M. of lumber. Plans, specifications and forms of proposal may be obtained by application to the Chief Engineer of the United States Reclamation Service, Washington, D. C., the Supervising Engineer, 1108 Union Trust Building, Los Angeles, California, or the Project Engineer, Klamath Falls, Oregon.

E. A. HITCHCOCK, Secretary.

## County Court House

Brunswick, Ga.

The County Commissioners of Glynn County, Georgia, hereby invite sealed proposals for the construction of a County Court House. All bids must be filed by 12 o'clock, noon, June 26, 1906.

Plans and specifications of the proposed building are on file at the office of the Commissioners in Brunswick, Ga.; also at the office of the County Commissioners of Fulton County, Ga., and at the offices of Charles A. Gifford and Edward S. Betts, associated architects, 18 East 17th Street, New York City. A set of plans and specifications will be furnished to parties desiring to submit bids, upon application to the undersigned, accompanied by a certified check for \$25, which amount will be refunded upon return of such plans and specifications. Full information will be furnished upon application to the Clerk of Commissioners.

J. J. LOTT, Chairman.  
A. O. TOWNSEND, Clerk.

## Public Work

Office of the

Constructing Quartermaster, U. S. Army,  
187 Middle Street,

Portland, Maine, May 17, 1906.

Sealed proposals in triplicate, subject to the usual conditions, will be received at this office until 11 A. M., June 15, 1906, and then opened in the presence of attending bidders for grading post site, sub-grading of roads, relaying railroad track, construction of roads, walks and gutters, and loaming and seeding at Fort Levett, Maine. A guaranty to the amount of 10 per cent. of bid required, which may be in the form of a certified check. Plans and specifications, with full instructions, and blanks may be consulted in the office of the Depot Quartermaster, New York City and Boston, Mass., or upon application at this office. The Government reserves the right to accept or reject any or all bids, or parts of bids. Envelopes containing proposals to be endorsed "Proposals for Grading, etc., at Fort Levett, Maine, to be opened June 15, 1906," and addressed to

MAJOR A. W. YATES,  
Quartermaster, U. S. Army.

## Sewer System

Sealed proposals for furnishing material and constructing a complete system of sewerage in Sewer District No. 1, City of Cape Girardeau, in accordance with the plans and specifications and ordinance No. 720 of said city, providing for constructing said system, will be received by the City Council of the City of Cape Girardeau, Missouri, until 8 o'clock P. M., Monday, July 2, 1906.

The work comprises about twelve miles of pipe sewers, eight to twenty-two inches in diameter, together with all necessary appurtenances.

Plans and specifications are now on file with the City Clerk at Cape Girardeau, Mo., and at the office of the engineer, Nashville, Tennessee.

Printed specifications may be obtained by addressing Geo. E. Chappell, City Clerk, Cape Girardeau, Mo.

A certified check for \$1,000 will be required with each bid for the construction of said sewers.

The right is reserved to reject any and all bids.

WM. H. COERVER, Mayor.  
GEO. E. CHAPPELL, City Clerk.  
GRANBERRY JACKSON, C.E., Engineer,  
Nashville, Tenn.  
Cape Girardeau, Mo., May 15, 1906.

## Pumping Station

Department of Public Works.

Bureau of Filtration.

Office, 710 City Hall.

Philadelphia, May 15, 1906.

Sealed proposals, endorsed "Bids for Pumping Station," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock noon, on June 20, 1906, for Contract No. 36, Pumping Station Building, Pump Well and Foundations, a Torresdale Filter Plant.

Specifications and blank forms upon which bids must be made can be obtained upon application at Room 712, City Hall.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

THOMAS L. HICKS,  
Director.

One reason why the Nash Road (the regular built road) will outlast any other road twice over, is, that it is regular built.

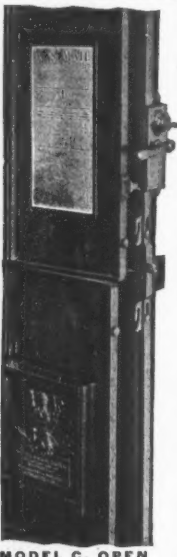
IS THERE ANY OTHER REGULAR BUILT ROAD? But there are other reasons, reasons known to and admitted by the ENTIRE PROFESSION OF THE CIVIL ENGINEERS which make it more than twice. HADN'T you better ACQUAINT yourself with these reasons.

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### SPECIAL NOTICE

In the respective following issues of the Municipal Journal and Engineer considerable space will be devoted specially to the subjects as indicated:—

—1906—

June 6th	- - -	PAVING
July 4th	- - -	WATER
August 1st	- - -	SANITATION
September 5th	- - -	THE CITY BEAUTIFUL
		—Parks, Monuments, Etc.
October 3d	- - -	FIRE AND POLICE
November 7th	- - -	LIGHTING
		—Gas, Electricity, Etc.
December 5th	- - -	BRIDGES

## BOOKS

### On Street and Road Construction, Sewer Systems, and Water Supply

**CITY ROADS AND PAVEMENTS SUITED TO CITIES OF MODERATE SIZE.** Second edition, revised and enlarged.—By W. P. Judson. 200 pp. \$2.00.

**STREET PAVEMENTS AND PAVING MATERIALS.**—A Manual of City Pavements: the Methods and Materials of their Construction. For the Use of Students, Engineers, and City Officials. By Geo. W. Tillson, C. E. 8vo, xii + 532 pages, 60 figures. Cloth; \$4.00.

**A TREATISE ON ROADS AND PAVEMENTS.**—By Ira Osborn Baker, C. E. 8vo, viii + 655 pages, 171 figures, 68 tables. Cloth; \$5.00.

**THE MODERN ASPHALT PAVEMENT.**—By Clifford Richardson. 8vo, 580 pages. Cloth; \$3.00.

**HIGHWAY CONSTRUCTION.**—A Treatise on Highway Construction, Designed as a Text-book and Work of Reference for All Who May be Engaged in the Location, Construction, or Maintenance of Roads, Streets, and Pavements. By A. T. Byrne, C. E. Fourth Revised and Enlarged Edition. 8vo, xi + 895 pages, 306 illustrations. Cloth; \$5.00.

**MUNICIPAL PUBLIC WORKS: THEIR INCEPTION, CONSTRUCTION, AND MANAGEMENT.**—By S. Whinery, C. E. 341 pages. Cloth; \$1.50.

**ENGINEERING CONTRACTS AND SPECIFICATIONS.** Including a Synopsis of the Law of Contracts; engineering specifications and accompanying documents; specific, descriptive, or technical clauses in specifications, including illustrated specifications for excavations and embankments; cement, mortar, concrete and masonry; street pavements and materials; sewers; water pipe; electric light station, etc.—By Prof. J. B. Johnson. 6 x 9 in.; 566 pp. \$3.00.

**SEWER DESIGN.**—By H. N. Ogden, C. E., Asso. M. Am. Soc. C. E. 12mo, xi + 234 pages, 54 figures, 5 plates. Cloth; \$2.00.

**SEWERAGE.**—The Designing, Construction, and Maintenance of Sewerage Systems. By A. Prescott Folwell, M. Am. Soc. C. E. Fifth Edition, Revised and Enlarged. 8vo, x + 455 pages, illustrated. Cloth; \$3.00.

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